

R  
234035 .

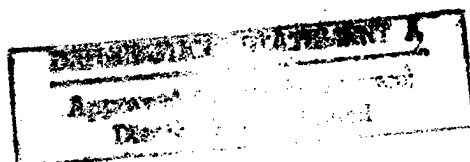
JPRS-CAG-85-021

26 June 1985

# China Report

AGRICULTURE

19980901 086



DTIC QUALITY INSPECTED 4

**FBIS**

FOREIGN BROADCAST INFORMATION SERVICE

REPRODUCED BY  
NATIONAL TECHNICAL  
INFORMATION SERVICE  
U.S. DEPARTMENT OF COMMERCE  
SPRINGFIELD, VA. 22161

3  
114  
A06

#### NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

#### PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semi-monthly by the National Technical Information Service, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

26 June 1985

## CHINA REPORT

### AGRICULTURE

### CONTENTS

#### PEOPLE'S REPUBLIC OF CHINA

##### NATIONAL

Double-Tier Structure of Collective Economy in Countryside Reviewed (Gao Hongin; NONGYE JINGJI WENTI, No 3, 23 Mar 85) .....	1
Agricultural Supplies Viewed Optimistically (NONGMIN RIBAO, 2 Jan 85) .....	13
Rapid Paddy, Fishery Development Reported (NONGMIN RIBAO, 3 Jan 85) .....	14
Multipurpose Grain Use Urged for High Returns (Ding Lushu; NONGYE JISHU JINGJI, No 2, Feb 85) .....	15
Compound Chemical Fertilizer Industry Further Developed (NONGMIN RIBAO, 4 Jan 85) .....	20
Hog Raising Encouraged as Profitable Activity (NONGMIN RIBAO, 3 Jan 85) .....	21
Tractor Production Up, Farm Machinery Diversified (NONGMIN RIBAO, 1 Jan 85) .....	22
1985 Farm Machinery Market Analyzed (ZHUANYEHU JINGYING BAO, 23 Feb 85) .....	23
Farm Byproduct Market Outlined (ZHUANYEHU JINGYING BAO, 23 Feb 85) .....	25
Rapid Development of Township Enterprises Reported (NONGMIN RIBAO, 1 Jan 85) .....	26
Procurement System Reforms Discussed (Duan Yingbi; NONGYE JINGJI WENTI, No 3, 23 Mar 85) .....	28

Agricultural Procurement Reform Stimulates Rural Economy (NONGMIN RIBAO, 2 Jan 85) .....	35
Trends in Rural Commodity Production, Fund Circulation Discussed (Wang Lan; NONGYE JINGJI WENTI, No 1, 23 Jan 85) .....	37
Problems in Coastal Rural Development Discussed (Lu Wen; NONGYE JINGJI WENTI, No 1, 23 Jan 85) .....	45
Theory, Policy of Land Use Transfer Studied (Dong Wozhang, Dong Li; NONGYE JINGJI WENTI, No 4, 23 Apr 85) .....	55
Timber Standardization Work Promoted (Dong Zhiyong; ZHONGGUO BIAOZHUNHUA, No 1, Jan 85) .....	61
New Standards for Timber Production Announced (Li Jinglin; ZHONGGUO BIAOZHUNHUA, No 3, Mar 85) .....	66
Self-Managed Rural Enterprises Assessed (Liang Tianzheng; NONGYE JINGJI WENTI, No 3, 23 Mar 85) ..	70
State, Enterprise Relationship Analyzed (JINGJI RIBAO, 29 Nov 84) .....	76

#### TRANSPROVINCIAL AFFAIRS

Rural Industrial Development Trends Discussed (Li Xingjia; ZHUANYEHU JINGYING BAO, 2 Mar 85) .....	81
---	----

#### HEBEI

Afforestation Progress Detailed (HEBEI RIBAO, 4 Jan 85) .....	83
Changes in Cotton Production Promoted (HEBEI RIBAO, 1 Jan 85) .....	85
Rural, Township Enterprises Show Gains (HEBEI RIBAO, 6 Jan 85) .....	87
Tax Policy To Aid Fodder Industry (HEBEI RIBAO, 1 Jan 85) .....	89
New Rural Machinery Household Trends Reported in Hubei (NONGMIN RIBAO, 4 Jan 85) .....	91

#### HUNAN

Rapid Growth of Production in State Farm Industry Reported (ZHONGGUO NONGEN, No 2, 24 Feb 85) .....	93
Output Value Doubled in 5 Years, by Qiu Yixing	93
Hunan State Farm System	95

## SHAANXI

Peanut Cultivation Reported Expanding (SHAANXI RIBAO, 18 Nov 84) .....	97
Peanut Acreage Continues Expansion	97
Peanut Production Praised	97

## SHANXI

Proper Winterizing of Wheat Fields Urged (SHANXI RIBAO, 27 Nov 84) .....	99
Briefs	
Overall Bumper Harvest Reported	101
Specialized Grain Storage Households Expanding	101

## ABSTRACTS

### AGRONOMY

ZHONGGUO NONGYE KEXUE /SCIENTIA AGRICULTURA SINICA/, No 1, 20 Feb 85 .....	103
---	-----

### CROP SCIENCE

DILI YANJIU /GEOGRAPHICAL RESEARCH/, No 1, Mar 85 .....	104
FUJIAN NONGXUE YUAN XUEBAO /JOURNAL OF AGRICULTURAL COLLEGE/, No 1, Mar 85 .....	105

### HYDROLOGY

SHUIWEN /HYDROLOGY/, No 1, 25 Feb 85 .....	106
--	-----

### PEDOLOGY

FUJIAN NONGXUE YUAN XUEBAO /JOURNAL OF FUJIAN AGRICULTURAL COLLEGE/, No 1, Mar 85 .....	108
--	-----

NATIONAL

## DOUBLE-TIER STRUCTURE OF COLLECTIVE ECONOMY IN COUNTRYSIDE REVIEWED

Beijin NONGYE JINGJI WENTI [PROBLEMS OF AGRICULTURAL ECONOMICS] in Chinese No 3, 23 Mar 85 pp 9-14, 33

[Article by Gao Hongin [7559 7703 6333] of Policy Research Department of Ministry of Agriculture, Animal Husbandry and Fishery: "Historical Understanding of the Double-Tier Structure of the Rural Collective Economy"]

[Text] Editor's Note: The author submits that the double-tier structure of combining centralized and decentralized functions in the rural economy has basically accomplished its historical mission. Practice that brought about further development of the rural commodity economy has historically demanded that the double-tier structure of combining centralized and decentralized functions be negated to form a new structure combining ownership of the means of production with the right of use. Only by implementing this new reform in the rural areas can further development of the rural commodity economy be assured. The writer has raised a number of questions in the article which are fundamental questions, both in practice and in theory, relating to the development of the rural economy. It is hoped that theoretical workers and practical workers across the country will enthusiastically take part in the discussion and contention of this question.

Engels once said: "Each stage is inevitable; therefore, speaking from the epoch and conditions of its happening, it has a reason for existence; however, with respect to the new and higher conditions gradually developed from within itself, it becomes outmoded and there is no reason for its existence; it has no other choice but to give way to the higher stage which will also head toward decline and destruction the same way" ("Selected Works of Marx and Engels," Vol IV p 213).

### I

The rural economic reform guided by the output-related contract system and begun in the heart of the rural economy 5 years ago has declared the modality of operations in agriculture characterized by "large in size and having a higher degree of public ownership" a failure that had led China's rural economy

into an impasse. When the output-related contract system was being widely implemented, the peasant household operation became the most basic level of operation in the rural economy and the double-tier structure of operation in the rural economy, characterized by certain functions centralized and others decentralized and by combining centralized with decentralized functions, was gradually and universally established. Undoubtedly, this is a revolutionary change of historic significance.

First of all, the output-related contract system and the double-tier structure of operations established thereupon had successfully transformed the modality of agricultural operations with centralized labor "eating from the same big pot."

The modality of agricultural operations implemented in the rural areas of our country for as long as 20 years as established on the idea of Marx and Engels concerning common ownership and centralization of labor and in accordance with the modality of collectivization in the Soviet Union. This type of modality had not only overlooked the low and uneven level of the productive forces in China's rural areas at that time but also denied the characteristics in agriculture itself. As a result, instead of creating the expected prosperous situation in the new socialist countryside, it severed the relations between the laborers and the means of production and the ultimate fruits of labor and constricted the laboring enthusiasm of the broad masses of peasants, thereby stagnating China's rural economy for a long period of time and making it impossible to shake off poverty from beginning to end. The historical and positive significance of the output-related contract system lies primarily in the fact that it transformed the modality of agricultural operations characterized by centralized operation and labor concentration into a double-tier operational structure that combined centralized and decentralized operation, gave the peasants more decisionmaking power and better integrated the peasants' immediate material interests with the ultimate outcome of productive operation and linked producers with the means of production, thereby greatly arousing the peasants' enthusiasm for production and markedly raising the rural productivity level. Just as eloquently proved by the history of rural economic development since the 3d Plenum of the 11th CPC Central Committee, the various rural undertakings centered around crop-growing have made smashing progress, China has for the first time initially solved the problem of having enough to eat and wear for the broad masses of the peasants, and rural economic development has become a miracle in both the Chinese and the foreign history of economic development.

Second, the development of the output-related contract system and the establishment of the double-tier structure have disintegrated the foundation upon which the operational modality of "eating from the same big pot" and labor concentration rested.

Old China was traditionally a country built on agriculture, the vast countryside was a boundless ocean flooded with hundreds of million of small producers. While the new democratic revolution had successfully overthrown the rule of the feudal landlord class, it did not break down the pattern of China's rural natural economy structured on small-scale production. In this state of natural economy, the rural economy was similar to the rural situation prior to the

French Revolution precisely described by Marx, a peasant "working in his production domain, that is, a small piece of land, is not allowed while farming to engage in any division of labor or apply any science, as a result, he cannot make manifold progress, acquire different skills or have plentiful social contacts. Almost every farming household is self-sufficient and directly produces most of its own consumer goods and thus relies mostly on exchange with nature instead of social contacts to acquire the means of livelihood. A small piece of land, a peasant and a family; on the side is another small piece of land, another peasant and another family. A group of these units becomes a village and numbers of this type of village form a province" ("Selected Works of Marx and Engels" Vol I p 693). The cooperative movement and a sequence of collectivization movements, including the people's commune, that followed in our country did not basically change this state, on the contrary, one small-scale peasant economy after another having nothing in common was drawn into a closed system, individually based on divided regions, thereby establishing a stereotyped modality of agricultural operation "large in size and having a higher degree of public ownership" on the basis of natural economy. Since this type of modality was designed based on men's subjective initiative instead of the needs of economic activities, the collective economy it molded, naturally, was not an economic entity developed by division of labor and trades and at best it "was formed by adding things of the same name together, like a sack of potatoes which was formed by individual potatoes in the sack" (Ibid. p 693). Therefore, it did not create the new productive force engendered from associations and cooperation on the basis of division of labor under normal conditions and it instead constricted the development of peasant household undertakings, severed the economic contacts between rural areas and between urban and rural areas, and hampered the expansion of division of labor and trades, thereby making it possible for the continued existence of the rural natural economic situation that had prevailed for several thousand years.

Even though there have been rapid developments in modern agricultural science and technology in the more than 30 years since the founding of the People's Republic which have been extensively put into use and although tremendous progress has been made in the agricultural productive force, due to the constraint and obstruction of the modality of agricultural operation characterized by "eating from the same big pot" and concentration of labor, not enough economic energy was generated and thus the outlook of the rural economy remained basically unchanged. It was the output-related contract system that broke through this depressing and perennially stagnant situation. As the level of the rural productive force continues to rise with the broad masses of the peasants freeing themselves from shackles and acquiring autonomous power, the natural economy is bound to crumble and the rural economy is bound to shift rapidly toward the path of a commodity economy. With the development of the output-related contract system and the establishment of the double-tier structure which provides strong stimuli to the most active productive elements in the rural economy, peasant enthusiasm for production has risen on an unprecedented scale and peasant household undertakings have continued to develop and consolidate. In addition, there has been a rapid increase in the total output of agricultural and sideline products, division of labor and trades in the rural areas has also developed vigorously, including the labor power, funds, technology and various types of means of production (for land as the principal means



of production, the transfer of the right of use is still limited) and other elements in the rural economy which have remained active on an unprecedented scale. The scope of the market economy has expanded continually and the various functions of the market mechanism are playing an increasingly positive role, a gigantic and prosperous rural market is rapidly rising to take the place of the old fragmented rural economic system with the modality of concentration of labor as the core. Thus, China's rural economy is breaking away from the era of natural economy and entering into a historical stage of commodity economy which it has never before experienced.

## II

It can be affirmed that the output-related contract system and the double-tier operational structure established thereupon have undeniable historical significance. However, while the people are attempting to expound the double-tier structure as an ideal modality, unexpected results have cropped up from dramatic historical development: In 5 years, the rural commodity economy, which owed its vigorous development to the motivation of the output-related contract system and the double-tier operational structure built thereupon, has gotten out of hand. Today, 5 years later, it has turned around to strongly impact upon itself. In the last 2 years, especially since 1982, this trend is becoming more prominent. Many phenomena in the rural economy are reflecting this trend from different aspects.

A. It is reflected in the "decentralized" level of the double-tier structure.

1. Peasant household operations have greatly developed with productive capabilities continually improving and accumulation gradually increasing. Compared with the early period of the contract system, the proportion of the peasant household economy engaged in contract economy is daily decreasing; the limits of the private sector within the peasant household economy are becoming more vague with each passing day. In peasant household operations, the collective economy has become more and more insignificant.

2. The contract economy portion in peasant household undertakings is going into the category of the peasant household economy in different ways. In the pastoral areas, the method of "turning over to households at a conversion price and private ownership for private raising" involving cattle herds, enclosing fences, sheds and barnyards and other kinds of services facilities under collective ownership is being rapidly popularized beginning with Nei Monggol, then Xinjiang and then Qinghai and later Xizang, winning universal and warm welcome by masses of herdsmen. This irresistible tendency has become a critical factor in reinvigorating the economy in pastoral areas. In Nei Monggol, which leads in the development, over 70 percent of the area has implemented this method. In fishing areas, the practice of "transferring fishing boats to a lower level and turning them over to households at a conversion price" is also very much welcomed by fishermen and is being gradually promoted from south to north. In agricultural districts, the traditional monopoly of public ownership of large and medium means of agricultural production has been broken through, for example, many areas in Heilongjiang Province turned over large and medium agricultural machines to households at depreciation cost last year.

Under these circumstances, giving peasants operational rights and the right of use alone can no longer satisfy the demands of the peasants. The broad masses of peasants have strongly put forth their demands for ownership. And the collective ownership of the means of production is precisely a most crucial feature of the double-tier operational structure.

B. It is expressed in the "centralized" level of the double-tier operational structure.

In the double-tier operational structure of the rural economy at the present stage, the "centralized" features are many and varied, besides the collective ownership of the means of production, they are primarily expressed in centralized planning, centralized operations, centralized fulfillment of state tasks, tax delivery and profit retention, and so forth. Of these multiple functions, there are two different situations:

1. The familiar and skilled function of the collective economy has lost its positive significance and its need for existence is gone. Take centralized planning and centralized fulfillment of the state tasks for example, during a period when agricultural and sideline products are not so abundant, it may be necessary to enforce state monopoly for purchase and marketing, coercively procure agricultural and sideline products at lower prices and insist on centralized planning and centralized fulfillment of the state tasks so as to ensure the needs of urban consumption and industrial development. However, as the market for agricultural and sideline products is changing from a sellers' market into a buyers' market and deficiency is turning into surplus, the system of state monopoly for purchase and marketing is now being swept into the museum of history, the market mechanism is drawing in rural economy in ever-expanding magnitude and in still greater depth and agricultural and sideline products will chiefly rely on market regulation. In the course of this historical change, no matter how much the people have yearned to preserve this system, it has no other significance except in constraining the peasants and hampering the development of production.

2. The function which the collective economy should undertake but has not fulfilled or has been unable to fulfill. An example is centralized operation. At the beginning of the contract system, the peasants "digging food from the soil" were chiefly engaged in growing crops. At that time, the collective economy still could rely on the production conditions created during the early period of "eating from the same big pot" and the portion of administrative power left over from the past in centralizing seed cultivation and breeding, centralizing tractor-plowing and centralizing control of water conservancy projects. This indeed had played a role in averting disputes, easing contradictions and promoting production. However, in the course of the development of the rural commodity economy, the role that can be played by this function is correspondingly diminishing. This is due to the expansion of division of labor and trades in the rural areas. Marx said: "Any new productive force, so long as it is not the sole expansion of the existing productive force (such as reclaiming new land) will give rise to further development of division of labor" ("Complete Works of Marx and Engels" Vol I p 25).

Two trends have emerged in the rural economy under the impact of the development of the division of labor and trades in the rural areas: the emergence of large numbers of specialized households of all categories and the rapid progress of rural economic specialization, and the vigorous development of rural industry and tertiary industry in the rural areas with more and more rural labor force leaving the farmland for other undertakings and waves of nonagricultural undertakings sweeping across the entire Chinese countryside. In face of the many and varied needs of the peasant households that showed up in the course of development, how much help can the regional economic organization created by dint of administrative means give? In fact, except for a few economically developed prefectures, the collective economy in most prefectures across the country has been very weak to begin with, with the reform of the people's commune structure separating the government from commune functions and the development of peasant household operations, the collective economy is just like the sun setting beyond the western hills, sinking fast and existing only in name; in fact, it is very hard to maintain its own existence, let alone providing a series of comprehensive social services for the specialized households in order to satisfy the many and varied needs of the peasants.

C. The vigorous development of the self-managed economy has created external pressure against the double-tier structure.

1. The sharp increase in the proportion of self-managed specialized households is expanding steadily. At present, of the 24.6 million specialized households across the country, over 60 percent are self-managed specialized households. In the Nanjing outskirts, which had an earlier start, the number of self-managed specialized households accounted for over 80 percent of all specialized households.

2. Peasant household enterprises (mainly industries) have put forth a rigorous challenge against enterprises run by communes and teams. (1) The self-managed peasant household enterprises developed very rapidly. According to a typical survey, a comparison between 1984 and 1983 showed that the village enterprises in Jiaocheng County of Shanxi Province increased 13 percent, hamlet enterprises 53.5 percent and self-managed peasant household factories increased 2.3-fold. In 1984, the number of village-township enterprises in Yanbei Prefecture, Shanxi, had grown to 47,400, out of which 39,600 were either self-managed by peasants or jointly operated by associated households, accounting for 83.5 percent. (2) The peasant self-managed enterprises scored higher economic results. According to an investigation, the productivity rate of peasant household factories put into operation in Yishan District of Wenzhou Prefecture, Zhejiang Province, was 1.1 to 10, and the productivity rate of the commune and team-run enterprises of the same trade put into operation was 1 to 2. The profit percentage rate of fixed assets per 100 yuan in village-run enterprises in Jiaocheng County of Shanxi Province was 106.5 percent, hamlet-run enterprises 114.1 percent and household self-managed factories 399.4 percent. The average cost of milk per jin of the peasant household dairy farm in Shanyang County was 38 percent lower than the collective dairy farm and profit per jin was 0.15 yuan or more than double that of the collective dairy farm. (3) The peasant self-managed enterprises are continually increasing in proportion in the rural economy. The rural industrial income of Jiaocheng County, Shanxi Province, in 1984 accounted for 65.8 percent of the total income of the county,

out of which the village-run enterprises occupied 12.7 percent, hamlet-run enterprises 14.5 percent and household industry 38.6 percent. The total industrial and agricultural output value of Gaoping County in 1984 amounted to 260 million yuan, of which agricultural came to 46.3 percent, commune and team-run enterprises 16 percent and household industry 37.7 percent.

D. The emergence in large numbers of various types of economic associations has also constituted another external pressure on the double-tier structure.

By the end of 1983, there were approximately 800,000 economic associations in the rural areas across the country, with 4.5 million peasant households participating, accounting for approximately 18 percent of the total number of specialized households throughout the country and about 2.5 percent of the total number of peasant households across the country. In Henan Province where the development was much faster, there were 87,000 economic associations joined by 668,000 peasant households accounting for 50.4 percent of the total number of specialized households in the province and 4.7 percent of the total number of peasant households in the province.

In the vast rural economic sphere, all these are no longer unique phenomena but have long become something common everywhere and are gaining popularity with each passing day. This type of powerful competition coming from internal and external pressure has fast split up the collective economy.

### III

The factors creating and propelling the development of this trend are manifold, resulting in part from the traditional psychological impact on the peasants shaped over several thousand years, from the contradictions caused by various kinds of noneconomic interference and also from the gaps created by the uneven economic development in various localities but most important of all they are the outcome of the rural economic movement itself. The double-tier structure is now negating itself in the course of the development of the rural commodity economy.

A. It has negated the basis of its own existence.

In actuality, the rise of this trend in the rural commodity economy is not only impacting on the double-tier operational structure but is also shaking up the status of the collective economy. Observed from the historical point of view, the double-tier operational structure had become the only possible choice of hundreds of millions of peasants under the social conditions at that time and also the sole possible choice accepted by society. It aimed at transforming the modality of agricultural operation characterized by "eating from the same big pot" and labor concentration, but the difference between the two was only the two different modalities of operation of the same economic organizations and economic entities founded on the same basis. In the course of struggle between the two sides, the double-tier operational structure, while denying the opposite side, has also destroyed the foundation of natural economy upon which the two sides commonly depended. With the skin gone, what can the hair adhere to. The double-tier operational structure is losing ground for its

existence while the rural economy is taking a historical course of changing from a natural economy into a commodity economy.

B. It has negated its own existence.

1. The "centralized" and "decentralized" functions in the double-tier structure are two closely related and mutually requisite aspects of an entity. Any change in one side will eventually lead to change in the other side and even change in the entire entity. As a household operation in one aspect, it continues to expand and develop vigorously; and on the other hand, as a "centralized" function in another aspect, it continues to become exhausted and degenerated and even lost. The outcome in this case is the certain total collapse of the entity.

2. The starting point of the double-tier operational structure is to provide production conditions for the contractors in the form of a contract through the collective economy. At this time, the existence of the collective economy and the double-tier operational structure are irrefutable, and it is right and proper that the production conditions belong to the collective and that the contractors have to deliver tax to the state and retain profits. However, the production process has to be continued without interruption, regardless of the social forms. The production process is also a process of reproduction. To continue production, a contractor must continue to transform a part of his products into means of production or new production elements again in the course of household operation. Even in simple reproduction, such as maintaining reproduction on the original scale and the production conditions initially provided by the collective economy, it is still necessary to replace the means of production already consumed in production with an equal amount of new products in kind, in other words, it is necessary to separate these new goods from the total quantity of products and incorporate them into the production process again. Therefore, "the fixed amount of annual products belongs to production" ("Capital" Vol I p 621), belongs to the production process by the contractors in the form of household operation. In the course of circulating and repetitious reproduction, under conditions in which the collective economy only takes in without giving out, after the contract system was implemented and with the development of peasant household operations, the nature of the production conditions initially provided by the collective economy were bound to change. In the mighty current of continual expansion of reproduction, the production conditions initially provided by the collective economy, as compared with the accumulation through labor shaped by household operation, will eventually become a daily diminishing quantity, that is, a quantity gradually approaching zero in the mathematical sense. Therefore, the basis for continually upholding the collective ownership of the means of production 5 years after the peasant household operation is implemented is conspicuously and amply lacking.

What should also be mentioned here is the problem of land as a principal means of production. In light of its nature as one of the production elements, it will undergo changes just as do all other production elements. However, because faith in the sacred principle of public land ownership (expressed in the form of collective ownership and state control) is wavering to varying degrees, this change is expressed in flexible forms at different tempos for elements

such as the land use right, the right to operation and transfer with compensation, and so forth. With the expansion of the rural market and the vigorous development of the commodity economy, these flexible forms will last for a long time but will in the end be broken through.

In the course of the development of the rural commodity economy, the production conditions initially provided to the contracts by the collective economy have changed or are changing into labor accumulation in peasant household operation in material form. The "centralized" and "decentralized" functions as mutual conditions are also undergoing continual changes. Therefore, the course of development of socialist commodity production is a process of self-negation of the collective economy and the double-tier operational structure adapted to it.

If it is said that during a preceding period the establishment of the double-tier operational structure had promoted the development of the rural commodity economy, then, the development of the rural commodity economy today as a fact has again demonstrated that it is obstructing this process. This finds expression chiefly in the fact that the existence of the collective economy and the double-tier operational structure--even if it is only existence in form in most places maintaining certain functions--has severed the "decentralized" level of the double-tier operational structure, namely, the economic contacts between contractors of the collective economy with the market and society. Even the contractors enjoy more decisionmaking power than the "commune members" under the modality of agricultural operation of concentrated labor. What they have are only operational rights or the right of use, they have no right to ownership nor can they ever shake off the constraint and influence of the "centralized" function of the collective economy, instead, they will still remain within an internal balance system drifting away from the market and cannot become independent commodity producers in the true sense, they can at best become another type of independent commodity producer--a spinoff of the collective economic system. A glaring contrast to this is provided by operators of the rural self-managed economy who have not only operational rights or the right of use, but also the right to ownership and direct participation in the market and who are the truly independent commodity producers. Generally speaking, those who engaged in the contract economy had an earlier start than those engaged in self-managed economy, having certain advantages in technology, funding and equipment most of the time; however, due to the type of subordinate status they are in and the characteristics of operations decided thereupon, compared with those engaged in self-managed economy, the disadvantages of those in the contract economy are predestined beforehand.

A. Those who engage in self-managed economy can freely choose the orientation of operation and the items of operation based on their own advantages and market demand. Those engaged in contract economy, on the other hand, have very little room for maneuver; they can only move on toward the direction dictated by the collective economy, namely, the direction dictated by the terms for production in the contracts.

B. Those who engaged in self-managed economy can expeditiously readjust the industrial structure, the product mix, the technical structure and the labor power structure and shift various production elements in a timely manner in

flexible response to changing market demand and price fluctuations resulting therefrom, but those who engaged in contract economy have no choice but to subject themselves to the restrictions of the collective economy. Those who have contracts "once set without changes for several years" will thus find themselves in a mechanism which only permits them to advance but not retreat. In an unpredictable market situation the outcome is readily conceivable.

C. Those who engaged in self-managed economy can directly accept market regulation. However, in the collective economic system, the impact of the market is not the most important factor; what should be taken into consideration first is that a rough balance with respect to the differences in income among various trades within should be maintained. Therefore, those engaged in contract economy must also accept the regulation of the double-tier structure of the collective economy. Contrary to the high regard some comrades have expressed about it, this type of dual regulation is not perfect. (1) The dual regulation is nothing but an abnormal development of the egalitarian way of distribution shaped during the period of "eating from the same big pot," a way which is incompatible with the principle of letting some peasants get rich first through labor. (2) The ratio of retention is extremely irrational. There are many forms of readjustment in the rural areas at present; retention having become a principal form after the all-round contract system was implemented. According to a typical survey in Sichuan, the ratio of retention for the commune and team-run enterprises under the collective economy was over 50 percent of the post-tax profits and as high as over 70 percent. What is more, when the river rises the boat goes up as the saying goes because the bigger the scale of operation, the bigger the retention will become. Moreover, the use of retention funds has been very extensive and the sum repayable is small. As a result, it will be very difficult for those engaged in contract economy to enlarge reproduction and even to simply maintain reproduction, thereby directly affecting the producers' enthusiasm for production.

D. Before average profits take shape in the rural areas, those who are engaged in self-managed economy can depend on their own accumulation to create production conditions and directly acquire above-quota social profits or average social profits. However, this is impossible for those who are engaged in contract economy. The collective economy itself only recognizes the differences in individual ability and carries out distribution based on the amount and quality of labor provided by the individual laborers and never allows the contractors to gain income higher than fellow workers by dint of the production conditions in the contracts. As viewed from the showing of the production conditions at the start of the contracts, this is equitable. Because the production conditions are created by the public accumulations formed by the historical modality of "eating from the same big pot" and labor concentration, thanks to the training expenses and opportunities provided by the collective economy, the contractors are able to engage in certain items of specialized production. However, as mentioned above, there is absolutely no reason for this in the light of realities today. The household operation in the course of its activities has changed the nature of production conditions. At this very moment, the right of ownership of the production conditions under the collective economy has changed into the right of possession without compensating the accumulation from material labor and labor products of those who are engaged in contract

economy. This undoubtedly is the transformation of the form of equalitarianism and indiscriminate transfer of resources; if continued, it is bound to form a strong motive force engendered from the collective economy itself which will push various production elements, such as funding, technology, resources and labor force (especially capable persons) outside of the collective economy for reorganization.

E. Those who are engaged in self-managed economy can, based on the many and varied needs in productive operations and their wish for autonomy, move from closed in to open operations, and in the daily expanding sphere, freely and extensively establish associations and cooperation in various forms and with different features, levels and links so as to shape them into appropriate scale. But the presence of the collective economy is hampering the contractors from stepping out from one small regionally closed society to another to establish and develop broadly many and varied contacts with society.

F. Those who are engaged in contract economy must also bear a kind of psychological pressure. The psychological pressure of seeing the right of ownership go to others as a result of the separation of the right to operation or the right of use from the right to ownership. The pressure will exist for a long time until these two rights are combined into one. The contractual period, regardless of how long it is, can only ease this kind of pressure but cannot basically put an end to the predatory operation due to this kind of pressure.

In short, in an environment of a rural commodity economy, the existence of the collective economy and the double-tier operational structure adaptable to it is obstructing the broad masses of peasant households from satisfying to the largest extent the needs of urban consumption and the development of the countryside as reflected through demand and supply in the market, it is also hampering the rational deployment of various production elements in the rural economy and impeding the peasant households from shaping up a most appropriate scale on the basis of the household economy. On the basis of the rural commodity economy, the collective economy has already lost the power to overcome such contradictions by itself; thus, such contradictions will become more acute as the rural economy develops.

Nevertheless, the shifting of China's rural economy from a self-sufficient economy to a commodity economy is a historical current that no one can stop. It will roll eastward toward the sea and green mountains cannot block it. No one can deny nor revoke the objective law of economic motion. Just as Marx put it: "The development of social-economic formation is a process of natural history" ("Capital" Vol I p 12). In line with "the law of nature of its motion, it still remains a developmental stage which cannot skip over nature nor abrogate it by decree" (Ibid. p 11) and "once life goes through a certain developmental period and enters from a certain stage into another stage, it will begin to subject to the control of another law" (Ibid. p 23). Therefore, in an environment where the rural commodity economy develops continually and under the control of the commodity economic law, the contradictions between the collective economy and the double-tier operational structure and the actual economic activities in the rural areas will be overcome in the end and the collective economy and the double-tier operational structure being negated will inevitably become an irreversible historical trend.



Practices in the development of the rural commodity economy will historically negate the collective economy and the double-tier operational structure. Such being the case, is the dispersed peasants household operation the most ideal in the environment of the new rural commodity economy? What can be called a planned commodity economy on the basis of socialist ownership? What road of development should China's rural economy follow? History is waiting for the people to give a scientific answer on the basis of summing up the practices of the development of the rural commodity economy in the spirit of seeking truth from facts. The sequel of this article will emphatically probe these questions.

12662

CSO: 4007/328

JPRS-CAG-85-021  
26 June 1985

AGRICULTURAL SUPPLIES VIEWED OPTIMISTICALLY

Beijing NONGMIN RIBAO in Chinese 2 Jan 85 p 1

[Article: "Supply Situation This Year Will Be Better Than in the Past: Sales of Agricultural Raw Materials Last Year Increased Almost 10 Percent"]

[Text] The supply situation of the nation's agricultural materials and commodities was very good in 1984: both sales and stocks increased. Particularly, the supply of high-quality commodities were sufficient and in time, and there were increased varieties. The conflicts between the supply and demand of agricultural materials were largely relaxed. The peasants were highly selective and their purchasing habits were controlled by time: they only purchased when needed. Based on the statistics released by the China Agricultural Production Materials Co, the national total value of retail sales of agricultural materials and commodities was estimated to be 24 billion yuan, increasing 9.6 percent compared with 1983. Sales of phosphate fertilizer dropped, but high-quality chemical fertilizers increased considerably. Due to the remarkable increase in productivity effect resulting from use of ground covering, the technology employed by the peasants was enhanced overall and sales of ground covering increased 45.5 percent compared with that in 1983. There was a comparatively considerable increase in the sales of highly effective pesticides that were low in toxic chemicals. The effective pest-control area also increased.

The China Agricultural Production Materials Co predicted that the supply situation of production materials in 1985 tended to be more optimistic than that in the past few years. The operational channels for agricultural production materials will also increase. The supply situation of agricultural production materials in 1985 will be more optimistic than that in the past. In line with the continual and strict implementation of the policy on chemical fertilizer awards and sales by the China Agricultural Production Materials Co in 1985, an overall opening in materials other than planned commodities will be carried out. In order to handle the policy well and to further expand the operational limits, supply units at all levels can stock all kinds of materials needed by the peasants.

12726  
CSO: 4007/193

JPRS-CAG-85-021  
26 June 1985

## RAPID PADDY, FISHERY DEVELOPMENT REPORTED

Beijing NONGMIN RIBAO in Chinese 3 Jan 85 p 2

[Article: "Nation's Paddy and Fishery Areas Now Exceed 10 Million Mu"]

[Text] In recent years, the developments in our nation's paddy fields and fisheries have been rapid. According to the statistics of some of the provinces and prefectures, the paddy and fishery areas broke through the 10 million mu mark last year. The predicted output might reach 120 million jin; the increase was 67 percent compared with that 2 years ago. The output of high-standard fish varieties amounted to 800 million; the increase was 51 percent compared with that 2 years ago.

Sichuan and Zhejiang provinces were comparatively outstanding in the work in the development of paddy fields and fisheries. The increase in the paddy and fishery areas of Sichuan was 56 percent compared with that 2 years ago, reaching 4.5 million mu. The yields of paddy and fish in the rural areas of Chengdu City made up 50 percent of the city's total aquatic output. The paddy fields and fisheries of Zhejiang Province are expanding from the one-crop paddy area in the southern mountainous region toward the double-crop paddy area on the plain. At present, the expanded areas have covered 64 counties and over 176,000 peasant households.

In order to popularize the knowledge of paddy and fish farming, all prefectures have taken the initiative to develop technical training: Hunan Province ran training classes for paddy and fish farming 223 times, training 17,322 persons. Jiangxi Province treated the peasant households engaging in paddy and farming as the training focus, and about 150,000 households were trained last year. The popularization of paddy and fishery techniques have promoted the development of paddy fields and fisheries. The pattern of "thousand jins of rice and hundred jins of fish" has emerged continually.

12726  
CSO: 4007/193

NATIONAL

## MULTIPURPOSE GRAIN USE URGED FOR HIGH RETURNS

Beijing NONGYE JISHU JINGJI [ECONOMICS FOR AGRICULTURAL TECHNOLOGY] in Chinese  
No 2, Feb 85 pp 7-9

[Article by Ding Lushu [0002 1462 2873], Bureau of Farm Cultivation, Ministry of Agriculture, Animal Husbandry and Fishery: "Adopt Multiple Measures To Improve the Results of Grain Transformation"]

[Text] I. Grain Transformation Is a New Task Facing Us Under New Circumstances

The restructuring of China's economic system has achieved enormous success in the countryside, allowing bumper agricultural harvests for successive years and great increases in grain, cotton and other cash crop yields. The average gross national grain yield for the 4 years from 1979-1982 was 601.7 billion jin. On this base, the yield in 1983 rose suddenly to 775 billion jin, a 28.8 percent increase over the average gross output of the previous 4 years. In 1984 the national grain yield reached 800 billion jin, a further increase of 25 billion jin over 1983. The enormous increases in gross national grain yield year after year made the state's original grain procurement capabilities fall far short of our needs. As a consequence, grain-selling difficulties appeared for the peasants in many localities, and the state had new problems with grain storage. For example, in Heilongjiang 4.9 billion jin of grain had to be stored by the peasants in 1984 instead of by the province because provincial storage facilities were insufficient. At the various state farms in the Dongxi Lake area on the outskirts of Wuhan, for the past couple of years there has been more than 60 million jin of grain in excess of storage capacity, so that there has not only been a great deal of waste but also an additional outlay of storage fees amounting to over 700,000 yuan.

In order to resolve these problems, I believe that, in addition to doing good jobs in storage and circulation tasks, it is essential that we successfully accomplish the "two grain transformations": That is the transformations into livestock products and into processed, prepared foods. According to UN Food and Agriculture Organization statistics, the per capita cereal holdings for 1978-1981 were as follows: 2,664 jin in the United States, 1,285 jin in the Soviet Union, 2,410 jin in Hungary, 579 jin in China and 403 jin in India. And, based on the calculation of China's 1984 gross grain yield at 800 billion jin, the per capita grain holdings are still less than 800 jin. Therefore, we cannot yet call China a grain surplus nation. Looking at the average

composition of cereal consumption for 1979-1981 in the United States, the Soviet Union, Hungary, Japan and India, China shows a great disparity, as shown in the following table:

Table 1. 1979-1981 Cereal Consumption Composition for China, the United States, the Soviet Union, Hungary, Japan and India (Unit: 1,000 Tons)

Country	Total Domestic Consumption	Composition					
		Fodder		Processing		Foodstuffs	
		Total Quantity	%	Total Quantity	%	Total Quantity	%
China	292,745	41,921	14.3	2,546	0.8	223,809	76.5
United States	178,783	132,571	74.2	20,506	11.4	20,757	11.6
Soviet Union	214,306	117,398	54.8	4,936	2.3	48,806	22.8
Hungary	12,207	9,267	75.9	575	4.7	1,657	12.2
Japan	40,013	17,026	42.6	2,449	6.1	19,979	49.9
India	144,729	1,335	0.9	8,573	5.9	125,443	86.7

From this table we can see clearly that Chinese cereal is primarily used for food and represents 76.5 percent of total consumption. Only 15.1 percent of our cereal is used for the "two transformations." By contrast, the amounts used for the "two transformations" in the United States, the Soviet Union, Hungary and Japan represent 85.6 percent, 55.1 percent, 80.6 percent and 48.7 percent, respectively, of total consumption in those nations. A calculation in absolute terms of annual per capita grain use for food (including processed foods) shows the following: 457.8 jin in China, 368 jin in the Soviet Union, 309 jin in Hungary, 367 jin in Japan, 367 jin in India and 192.4 jin in the United States.\* The greater the proportion of cereal used for fodder in a country, the greater the proportion of meat, milk, eggs and other livestock products in the composition of the people's diet. The reverse is also true. This is a major indicator for evaluating standards of living.

Under the circumstances of large grain production increases in the past few years, on the one hand China already possesses the material conditions for grain transformation, as is seen by the abundance of grain in various locales and the grain-selling and grain storage difficulties. In addition, the people's dietary composition for the most part is directly consumed as grain. This is an unreasonable dietary composition that is also rather low in nutritional value. Consequently, acceleration of the pace of grain transformation has become a new task facing China.

## II. Multipurpose Use Is the Major Route to Grain Transformation

Grain transformation, in whatever form it takes, involves problems in many areas, and we cannot proceed in isolation. We must create various conditions

\*The data cited above is based on incomes calculated from the "Cereal Balance" section of the UN Food and Agriculture Organization's "1979-81 Food Balance Table."

suited to grain transformation before we can obtain good results with it. If we are to transform grain into livestock products, then we must establish corresponding feed processing and feed compounding industries, these to include feed additive and trace element production and compounding, as well as livestock breeding and epidemic prevention. We must also have the corresponding scientific compound of green fodder and roughage with concentrated feed. This then requires a readjustment of composition in cultivation industries, which brings about in turn an inevitable series of changes in the crop system. These changes then must be beneficial to a good agricultural production cycle, both allowing improved economic results with grain transformation and conforming to the ecological benefits of overall agricultural production. Along with the large-scale increases in livestock products, we must establish corresponding refrigeration, storage and transport, processing, marketing and other production services. Therefore, for grain transformation we must set up integral, systematic operating concepts and put multipurpose operation and multipurpose usage into practice.

Practice confirms that suiting measures to local conditions and implementing multipurpose operation and multipurpose usage are the primary routes to attaining high results. For example, Farm 8511 in Heilongjiang has 220,000 mu of cultivated land, and in the past it was a grain farm producing exclusively commodity grain. Since 1979 this farm has made great efforts to expand into raising dairy cows. They have set up corresponding farm and livestock product processing industries and have progressively shifted from an emphasis on commodity grain production to an emphasis on the production of foodstuffs. They use one-fifth of their cultivated land to grow crops for concentrated feed and for use in the food industry, and at the same time they have established a feed processing industrial setup and grow green fodder based on actual needs for raising dairy cows. As of 1984 the number of dairy cows on the farm had expanded to 3,200 head, an increase of more than 100 percent over 1979, and gross milk output increased from 3,000 tons to 8,000 tons.

Following from the development of the livestock industry came a large supply of manure for croplands, and, through readjustment of crop composition, crop rotation was improved and grain yield was increased. In addition, they developed a food processing industry centered on dairy products, which annually produces more than 1,000 tons each of high grade milk powder, malted milk extract and fermented bean curd powder, 1,500 tons of fruit toffee and more than 5,000 tons of beer. The gross output values of the livestock industry and the food processing industry have risen from 20 percent to 65 percent as a proportion of the farm's overall gross output value. In 1983 the farm profited approximately 3.2 million yuan, an increase of 1.9 times over 1978.

Sanhe Farm in Jiangsu used surplus grain and local natural conditions to expand into raising ducks, swine and fish. The farm raises a total of 103,000 ducks, an average of 42 per household; 4,200 swine, an average of 1.7 per household; and 1.21 million fish. In addition, they utilize the fishponds to raise ducks, they use the duck manure to enrich the water for raising fish and they process duck eggs into preserved eggs. They practice multipurpose operation and multipurpose utilization, and they accomplish integration of breeding and processing. In 1984 this farm transformed a total of 4.04 million jin of grain and increased proceeds by 88 percent over what would be obtained by directly marketing the grain.

In 1984 a young girl on the Cuimen Livestock Farm in Qiqihar used surplus grain to raise 200 chickens that supplied 4,110 jin of fresh eggs for market at an annual profit of more than 3,800 yuan. Rearing one laying hen generally profits 10 yuan per year, so one only needs to raise 1,000 of them to become a "10,000-yuan household." The pasturelands of one family in the Shihezi General Sidelines Company of Xinjiang Production and Construction Corps raises four head of dairy cows and profits more than 10,000 yuan per year. Add their cultivation pursuits to this and the annual net income exceeds 20,000 yuan. Anda County in Heilongjiang adopted the method of simultaneously developing specialized households and family farms. They brought into play the advantages of a local abundance of grain and vast grasslands by developing dairying. In addition, they established a dairy pre-production, production and post-production service system on a broad scale so that the county dairy industry expanded rapidly.

In 1984 the dairy industry throughout the county was raising 22,500 head of cattle, an increase of more than 100 percent over 1979. The gross annual milk output reached over 35,000 tons, for per capita milk holdings in the county amounting to 163 jin. As a consequence, the local grain surplus is transformed into milk and further processed into various dairy products to supply the marketplace, thus vastly raising the value of the grain and rapidly enriching the peasantry.

Carrying out processing to transform grain is also well worth doing. In the South, polished long-grain nonglutinous rice is an unsaleable product right now. Cansang Reclamation Farm in Jiangxi first of all makes this rice into high quality oral glucose, and then it uses the glucose to process and manufacture sorbitol, the raw material for vitamin C. Thereafter, it uses the liquid waste from the manufacture of glucose--the mother liquor produces monosodium glutamate. This farm has formed a processing and production assembly line that intensively processes multipurpose uses for polished long-grain nonglutinous rice. Through this kind of multilevel, intensive processing, the value of 1 ton of this rice rises from 284 yuan to 3,543 yuan, an increase of 11.6 times, and achieves a profit tax of 1,663 yuan--a profit tax on output value as high as 32.9 percent. In Zhaodong County, Heilongjiang, after the peasants completed their state grain procurements and withholdings in 1983 there remained over 200,000 jin of surplus grain. They used this to develop fodder and foodstuffs processing industries and shifted to various bean products, foodstuffs, liquors and assorted mixed fodders. In the wake of expansion in the fodder industry and the supply of large quantities of sideline products, they also vigorously promoted the expansion of breeding endeavors. As of October 1984 the farm was raising 14,000 head of dairy cows and 220,000 head of swine; poultry, beef cattle, rabbits and fish had all been extensively developed; and the quantities of meat, egg, milk and fish commodities had increased by a large margin over previous years. The 1,530 small household grain-processing mills took in a gross income of over 15 million yuan, an increase of 55 percent over the previous year.

### III. Apply New Technology and Strive for Good Results

The purpose of grain transformation lies in improving economic and social results. The major indicators of improved economic and social results with grain transformation are concentrated and expressed in the good quality and low price of the transformed grain products. From the point of view of developing the commodity economy, commodities can only be competitive in the marketplace if they are of good quality and inexpensive. The key to achieving good quality and low price lies in adopting the newest advanced technology. A look at practical experiences in China and abroad shows that when the technologies for identical types of grain transformation work are themselves different, the results differ enormously. In animal husbandry for example, if the cattle used for beef are of a superior variety, by comparison with ordinary varieties the meat-producing unit can save one-fourth to one-third on concentrated feed. Similarly, due to different rearing techniques and fodder formulas, raising "Duroc" improved lean-meat porkers presents very different meat to feed ratios during the fattening period. Based on measurements, the ratios are as follows: on Harbin's Xiangfang Farm the ratio of meat to feed is 1:3.875; on Liaoning's Shishan Breeding Farm it is 1:2.76; and on Sanhu Farm in Hubei it is 1:2.32 prior to the fattening period and 1:2.68 after the fattening period, averaging at 1:2.485. Likewise, to produce 1 jin of lean-meat pork, Sanhu Farm saves 1.39 jin of concentrated feed, or 56 percent, by comparison with Xiangfang Farm. Hongguang Farm in Tianjin divides the egg-laying period for laying hens into a high-output period, a medium-output period and a low-output period. Based on the nutrition necessary for the daily egg yield, they have readjusted the feed formula of the past into three feed formulas with different compositions. This has made egg output rise by 11 percent and lowered feed costs by 12 percent.

In breeding, if one raises the best varieties and adopts the best rearing methods and feed formulas then one can achieve very good results. However, one cannot achieve these three "bests" without relying on advanced technology. It was through the application of advanced technology that Cansang Reclamation Farm in Jiangxi achieved multilevel intensive processing of polished long-grain nonglutinous rice and raised its value by more than 10 times. They adopted a method integrating chemical and biological processes, undertook more than 60 trials and acquired over 600 data items before they finally achieved a success that is unmatched elsewhere in the nation. Therefore, in large-scale expansion of grain transformation work, we must adopt various methods and accelerate the training of talented scientific and technical personnel in order to suit the requirements of the developing situation.

12510

CSO: 4007/310



JPRS-CAG-85-021  
26 June 1985

COMPOUND CHEMICAL FERTILIZER INDUSTRY FURTHER DEVELOPED

Beijing NONGMIN RIBAO in Chinese 4 Jan 85 p 1

[Article: "Further Development of China's Compound Chemical Fertilizer Predicted Under the Integration of the Import of Advanced Technology and the Development of New Industries"]

[Text] The chemical fertilizer industry of our nation will adopt the method of "walking on two legs" by importing foreign advanced technology and by developing new industries vigorously. In 1985, the compound chemical fertilizer industry will be further developed.

Foreign advanced technology is being imported. Our nation successively set up two large facilities for the production of compound chemical fertilizers, one at Lucheng in Shanxi Province which produces 980,000 tons of phosphatic nitrate fertilizer annually and another at Tongling in Anhui Province which produces 140,000 tons of ammonium phosphate, thus laying down the preliminary foundation for the compound chemical fertilizers industry.

In recent years, the phosphatic fertilizer factory of Yinshan and the Technology University of Chengdu, Sichuan have studied and successfully developed a new technology, the "size concentration method," in the manufacturing of phosphamidon. Medium- to low-grade minerals with a high percentage of impurities are used to produce a highly concentrated compound chemical fertilizer with over 52 percent effective ingredients. At present, over 10 phosphatic fertilizer factories in the nation are constructing the facilities for the production of phosphamidon. The annual output ranges from 10,000 to 30,000 tons. In addition, the "size concentration method" will be adopted.

After the import of technology and the development of new industries, the national annual output of compound chemical fertilizers could reach about 3 million tons, accounting for about 20 percent of the national gross output of chemical fertilizers.

12726  
CSO: 4007/193

JPRS-CAG-85-021  
26 June 1985

## HOG RAISING ENCOURAGED AS PROFITABLE ACTIVITY

Beijing NONGMIN RIBAO in Chinese 3 Jan 85 p 2

[Commentary: "Hog Raising, a Profitable Activity"]

[Text] Since the 3d Plenum of the 11th CPC Central Committee and following the establishment and improvement made in the household planned-output system of contracting responsibility and the adoption of preferential policy, the development of hog raising is comparatively fast. For a period of time, the situation of "meat being scarce" for the people of the nation was reversed. However, within these 1 or 2 years and due to various reasons, the number of hogs reared trended downward. Therefore, in some cities and towns, the rationing of pork via the issue of food coupons was again implemented. Such a situation should arouse the close attention of leaders at all levels.

Except for the nationalities who are Muslims, a large proportion of the masses in our nation are accustomed to eating pork. On the dining tables of the masses in the urban and rural areas, pork is served almost every day. The quantity and varieties of pork are the indexes of the prosperity of the market. In addition, hog raising can transform the surplus of local food-grain and can provide a large amount of organic fertilizers. The declining number of hogs reared has a significant effect on the masses' life, agricultural production and the transformation of foodgrain. The leading cadres of the Central Committee pointed out recently that the structure of animal husbandry in our country, from a long-term point of view, might have the following ranking: cattle, sheep, hogs, poultry and other livestock. However, henceforth for a period of time, hogs still rank first, thus indicating that the stress on hog raising remains important in the present breeding industry.

As learned from the experiences of various prefectures, the development of hog rearing should rely on policy. Baicheng Prefecture's goal was first to expand the sources of hogs by adopting the methods of establishing close links with the hog farms and hog manure, establishing hog-raising funds, offering preferential aid to the hog-raising specialized households, etc. Its basic point was to let the hog-raising households be lucrative. Additionally, great efforts should be made to develop the feedstuff-processing industry; the pre- and post-raising and raising service works should be handled well; the hog-raising costs should be largely lowered and the opening up of supply and marketing and adaption to industries and markets should be gradually implemented so that the income of the hog-raising households will not be below that of those who are engaged in grain production or other livestock raising, and hog raising will develop steadily.

JPRS-CAG-85-021  
26 June 1985

## TRACTOR PRODUCTION UP, FARM MACHINERY DIVERSIFIED

Beijing NONGMIN RIBAO in Chinese 1 Jan 85 p 1

[Article: "Number of Tractors Doubles Compared to 5 Years Ago: Peasants and Joint-Households Own 68 Percent of All Tractors"]

[Text] According to the Agricultural Machinery Bureau of the Machinery Industry Department, the total number of large and small tractors of the nation by the end of 1984 was 4.11 million, and compared with the 1.93 million tractors of 1978, the quantity increase more than doubled. Individual peasants and joint-households owned 2.78 million tractors, 68 percent of the nation's total number of tractors.

The domestic agricultural machinery market is increasingly active, with a vast number of rich peasants entering the agricultural machinery market. According to the statistics of the China Agricultural Mechanized Service Co, the cumulative sales of agricultural machinery from January to November 1984 amounted to 6.39 billion yuan; the increase was 19.7 percent compared with the same period last year. Sales might reach 6.5 billion yuan by the end of the year. On the peasants' purchase lists for agricultural machinery, small tractors with relatively reliable performance and relatively good quality remained their first choice. According to related sources, although the 1984 plan to produce 450,000 small tractors annually had been accomplished 2 months ahead of time and the total quantity could reach 650,000 by the end of the year, the demand has not yet been met. Based upon the forecast, the number of small tractors employed in rural areas would increase to 3.3 million by the end of the year, among them, 2.5 million tractors being owned by the individuals (or joint-households), indicating that 3 out of 4 tractors were self-owned.

Brisk sales have brought about enthusiasm in production. The agricultural machinery industry readjusted the product structure, adapting to the needs of rural commodity production and development. Changes were made from the production of farming machinery in the past to the production of machinery employed in agriculture, forestry, animal husbandry, sideline products, fishery and various processing industries. The 1984 plan to attain 8.8 billion yuan in gross industrial output value was met ahead of time, by the end of October. By the end of this year, the gross output value could break through 10 billion yuan, hitting 10.5 billion yuan.

12726

CSO: 4007/193

NATIONAL

1985 FARM MACHINERY MARKET ANALYZED

Beijing ZHUANYEHU JINGYING BAO in Chinese 23 Feb 85 p 4

[Excerpt: "1985 Farm Machinery Market: Trend Analysis"]

[Text] Purchases and sales on the farm machinery market were brisk in 1984, with a total sales volume of 6.3 billion yuan. What changes may take place this year? This question sparks a high level of interest among the nation's specialized households.

1. Small tractor market cools; hand-held tractor market steady. In recent years, small tractor demand has been lively. 250,000 were sold in 1982, 400,000 in 1983, and 550,000 in 1984. But analysis of current trends for this year by the National Farm Machinery Sales Convention shows that orders of hand-held tractors will be off while that for small 4-wheeled tractors will continue to rise, but overall there will be no great increase.

Farmers are gradually shifting their spending from food to buying farm equipment. The current trend is for a shrinkage in purchases of small tractors and an increase for large ones. Demand is for large-horsepower tractors with good driver conditions and versatility. Small hand-held tractors have little transportation functionality compared with the 4-wheeled models which can be used both in the field and for transportation; and sales are off in 13 provinces. Prospects for this year call for sales holding steady or off for all models but name-brands from Changzhou and Wuxi.

2. Upturn for large and midsize tractors and a drop for processing equipment. Sales of large and midsize tractors began to fall dramatically in 1981 and inventories grew. This began to change in the latter half of 1984, and many factories sold their entire stocks. There is already a shortfall for such models as the Shanghai-50, Tieniu-55, and Dongfanghong-75; 46,700 large and midsize tractors were ordered by customers at the 1985 Farm Machinery Sales Convention, double the previous year's figure.

This upturn for large and midsize tractor demand is due largely to the fact that farmers are starting to use these tractors and other processing equipment to engage in venture production. In addition, as rural commodity production develops and transportation volume increases, farmer demand for transportation equipment is growing sharply. With the present shortage of trucks, many

specialized transportation households are using large and mid-sized tractors for medium and longhaul transportation. Such tractors are also needed for deep-harrow tilling in the northwest where the soil is compacted and lacks permeability. For this reason, these large and mid-sized tractors will be hot items in 1985.

After a continual rise for 3 straight years for farm byproduct processing equipment, sales in 1984 were off for the first time, and projections call for a further drop in 1985. The present demand for grain processing machinery is large. Rural township enterprises engaged in byproduct processing, food processing, and integrated processing are in the market for variety, functionality, and high quality. For this reason, vigorous development of well-selling products is needed, with stress on variety and quality.

3. Farm diesel equipment supply still short of demand. Farm transportation vehicles are now on the market. Supplies of small model diesel machines have been short of demand for years, especially for the name-brand 195 model diesel. 1985 orders for diesels are now at 30.8 million horsepower, up 45.5 percent from the same period in 1984. Demand is up for diesels for ocean and river vessels. Based on surveys, development of water transport has been rapid. There are over 200 specialized water transport households in one village of Wujiang county in Jiangsu. Also, in depressed areas where electricity is unavailable, the economy is picking up as well. Specialized households are enthusiastically purchasing irrigation, processing equipment and power trains. Original shipboard or small tractor power trains must be overhauled occasionally, and demand for overhauls amounts to some 500,000 in a given year. So it is forecast that within a few years demand for diesels will rise steadily.

Most farm transport is now done by tractor. But tractor transport is slow and dangerous and uncomfortable for the driver. Economically, it does not make as much sense as using motorized transportation equipment. Yet shorthaul transport with such equipment is also uneconomical. The basic specialized household wants a transport machine that is inexpensive, convenient to use, and suited to rural conditions. In 1985 a transport vehicle will be marketed that will have some of the features of a truck and some of a tractor. This vehicle will be rational structure, versatile in its operation, small in turning radius, good at climbing hills, economical, and easy to repair. 1985 forecasts are that a certain number will be marketed which will be grabbed up by specialized transport households.

12303

CSO: 4007/303

NATIONAL

## FARM BYPRODUCT MARKET OUTLINED

Beijing ZHUANYEHU JINGYING BAO in Chinese 23 Feb 85 p 4

[Article: "Supply and Demand Situation for Major Farm Byproducts Nationwide"]

[Text] According to figures from concerned departments, products for which demand exceeds supply include: peanuts, whole and shelled, peanut oil, rapeseed, coarsely-ground sesame oil, cottonseed oil, linseed oil, safflower oil, tung oil, grades 3-4 and 5-6 textile cotton, top-grade tealeaves, Oolong tea, Nanlubian tea, cowhide, locally-produced sheep's wool, semi-fine sheep's wool, and improved sheep's wool, cashmere, grade-3 and better rabbit fur, foxhide, raccoon hide, assorted rare furs, assorted wooden sticks, wax insect, kapok, xiang wan [4767 2704], egg products, beef, mutton, poultry, bananas.

Products with balance between supply and demand include: polished round-grain nonglutinous rice, beancake, millet, assorted small grains, barley, assorted small beans, mung bean seed oil, sesame, dacao [1129 2864] sesame oil, tea-seed oil, soya oil, castor oil, ambari hemp, daylily, hemp, red tea, feathers, goat wool, hog bristles, hog casings, sheep casings, lambskin, xiaohu sheepskin, sheepskin, Huabeilu goatskin, mao bamboo, hao bamboo, bamboo strips, wood charcoal, grass sacks, alpine rush, reeds and reed products, pork, apples, mandarin oranges, red dates, pears, walnuts, chrysanthemums, woodchuck, anise, and prickly ash.

Products where supply exceeds demand include: wheat, polished long-grained glutinous rice, polished glutinous rice, soy beans, corn, tubers, sorghum, broad beans, sunflower seeds (in producing regions), sunflower oil, cypress oil, cotton, shaoqing green tea, fine wool, watergoat casings, huaze pi [3736 1311 4122], horsehair in assorted colors, dogskin, grass rabbit fur, rabbit fur in assorted colors, palm strips, raw lacquer, honey in producing regions, beeswax, acorns, jinggangci [6855 0474 0459], noncultivated papermaking materials, zhegan [5347 2616], cubeb litsea fruit oil, hot pickled mustard, and pepper.

12303  
CSO: 4007/303

JPRS-CAG-85-021  
26 June 1985

## RAPID DEVELOPMENT OF TOWNSHIP ENTERPRISES REPORTED

Beijing NONGMIN RIBAO in Chinese 1 Jan 85 p 1

[Article: "Under the Reform and Opening, 1984 Gross Output Value of Rural, Township Enterprises Reached 150 Billion Yuan: Self-Owned and Joint Enterprises Through Pooled Funds in Some Prefectures Made Up Over One-Half of the Total Number of Enterprises"]

[Text] According to the forecast of the departments concerned, the rural and township enterprises of the nation that were responsible for the increased agricultural output developed steadily at a rapid rate under the restructuring and opening in 1984. Gross output value could amount to 150 billion yuan, increasing 23 percent compared with that of the preceding year.

The characteristics of the speedy nationwide development of rural and township enterprises were not only that many prefectures with developed rural and township enterprises could maintain the impetus of rapid development, but that some prefectures' rural and township enterprises with relatively weak foundations tried their best to catch up with the rest, and as a result, the latecomers surpassed the oldtimers. The output value of the rural and township enterprises of Anhui Province had ranked last in the eastern China region. By the end of October last year, the gross output value rose to 3.1 billion yuan, increasing by 65 percent compared with that of the preceding year. The developing rate ranked first in the nation. The gross output value of the rural and township enterprises of Fujian Province was 3.7 billion yuan last year, an increase of 31 percent compared with that of the preceding year.

The most remarkable characteristic of the development of the rural and township enterprises last year was that both the joint enterprises run by the peasants' collected funds and self-owned enterprises developed very fast. In many places, enterprises that were run under these two forms accounted for more than 50 percent of all rural and township enterprises. In Hebei Province, the collected funds of the peasants amounted to 1 billion yuan, operating 40,000 enterprises and various services. The collected capital of the peasants in Hubei Province for the operation of enterprises was almost equal to 10 times the total annual aid granted by the state to the rural and township enterprises of the province.

In order to face the new challenge of the restructuring of the urban and state enterprise system, the rural and township enterprises of all prefectures greatly accelerated the development and utilization of intellectual and information resources, obviously enhancing the competitiveness of the commodities and economic results of the enterprises. Last year, Zhejiang established a file of capable persons through a survey of talented persons. Outstanding factory chiefs (managers) were selected. A staff of more than 100,000 supply and marketing personnel was organized to set up activities, such as information networks, etc., accelerating the development of rural and township enterprises and attaining a 10 billion yuan break through in gross output value. Last year, the gross output value of Jiangsu Province's rural and township enterprises amounted to 21.5 billion yuan. Since the development of intellectual resources was the major measure of its rising enterprises, training of professionals in various ways was adopted. There were over 44,000 staff and workers of the rural and township enterprises studying in the provincial broadcast television university.

The locally developed rural and township enterprises rapidly opened their "stockaded village doors," establishing "both external and internal connections." The rural and township enterprises of Guangdong Province were the earliest to utilize foreign investment "by providing labor on the bases of the imports of capital, raw materials and technology," and charging processing fees. Last year, Guangdong began to develop a vast number of enterprises via Sino-foreign joint ventures. According to incomplete statistics of the municipalities and provinces, e.g., Tianjin, Beijing, Liaoning, etc., trade talks were held with foreign traders on 196 projects last year. At the same time, the rural and township enterprises speeded up their pace in cooperating with the large industries and science and research units. By accepting their diverse products and introducing their scientific and research achievements, large-scale development of rural and township enterprises was accelerated.

12726

CSO: 4007/193



NATIONAL

PROCUREMENT SYSTEM REFORMS DISCUSSED

Beijing NONGYE JINGJI WENTI [PROBLEMS OF AGRICULTURAL ECONOMICS] in Chinese  
No 3, 23 Mar 85 pp 40-43

[Article by Duan Yingbi [3008 2019 4310] of the Chinese Rural Development Research Center: "Reform the Unified and Assigned Procurement System for Farm Products; Further Revitalize the Rural Economy"]

[Text] Beginning this year the state will no longer issue unified or assigned quotas for all but a few excepted farm products. Depending upon differing circumstances, contract orders and market procurement will be implemented respectively. In other words, the unified and assigned procurement system implemented by the state for the long period of 30 years for major farm products will be gradually eliminated. This second major reform, following implementation of the responsibility system, will inevitably lead to further liberalization of rural productive forces and bring a new up-surge to the rural economy.

I. Reforms Needed in Unified and Assigned Procurement

Beginning in October of 1953, China successively implemented unified procurement for grain, cotton, oils, and timber and assigned procurement for over 100 other major farm products. It should be granted that unified and assigned procurement of farm products was something totally necessary in the past. China has a large population and little land. With farming undeveloped, farm products were always in short supply. At the same time, owing to the weakness of the nation's industrial base, economic construction had to proceed from capital accumulation in agriculture. Under these circumstances, if unified and assigned procurement had not been implemented, unimaginable consequences might have arisen. Still, it should be noted that the unified and assigned procurement systems implied a state monopoly in commodity farm products, a situation widely divergent from the objective laws of commodity exchange. As it grew, it unavoidably led to a paralysis of production and circulation and consequently to a whole range of abuses which had an impact on the development of rural commodity production and on improved economic results.

From the standpoint of experience, the abuses of the unified and assigned procurement system for farm products have been legion, and the restraints which these systems placed on rural productive force were serious ones. Thus, reform is necessary.

First of all, unified and assigned procurement hinder adjustments to production arrangements and enterprise structures, affecting the ability to bring local advantages fully into play. Since unified procurement quotas are mandatory, they must be filled. Regardless of whether natural conditions were appropriate or whether economic results were favorable, production had to be carried out in accordance with quota requirements. China has over 100 million mu of cultivated land which is on slopes in excess of 25 degrees which should have been used for forests or grazing rather than being tilled. Yet the state issued state procurement quotas for more than 15 billion jin of grain for these regions. As a result, not only did these areas not revert to other uses, but conversely, forests and wilderness areas were continually cut back. In the Pearl River delta, the average mu of grain had an output value of a mere 202 yuan while the same figure for vegetables, fruits, and other cash crops was as high as 623 yuan. And owing, too, to these oppressive quotas, even if the farmers were unwilling, they had to plant all that grain nevertheless. In Hunan it even reached the absurd point that "the fish were in the hills and trees under the water."

Second, unified and assigned procurement hinder improvements in farm product quality. In those years there were considerable increases in the volume of farm products, but instances of poor quality and lack of variety were endemic. Taking wool as an example, the usability rate for imported wool is above 80 percent while that for state-produced wool hovers around 30 percent or in some cases even 20 percent. As a result, every year a large amount of trash was shipped from the northwest to Shanghai. Of course, the causes of drops in quality are multifaceted; but one of the major reasons was still the shortcomings of the unified and assigned procurement system. In implementing this system, the state agreed to procure the products produced; and as far as the farmer was concerned, quantity was the only consideration. No heed was given either to whether the product had a market or whether quality was up to standard. Unavoidably, it was quantity which was sought, while quality was not a concern.

Third, unified and assigned procurement hinders the normal circulation of farm products. Where this system is in effect, quotas are issued and goods allocated and transferred in accordance with the various levels of administrative districts. There was no direct connection between production and sale. Circulation routes for commodities were circuitous and direct channels had no way of being set up. The so-called "organization of commodity circulation in accordance with rational economic directions" became in reality so many empty words. At the same time, in order to assure procurement, allocation, and transfer, the state had to set up certain specialized administrative companies from the top down, for the exclusive purchase and sale of the particular products which had been procured. Since farm production was seasonal, the procurement period for some of these specialized companies was less than 2 months. Most of the time there was nothing to do, while in the brisk season things became excessively busy. All this did was artificially increase circulation expenses and create undue losses of farm products.

Fourth, unified and assigned procurement hinder the transformation of farm products. As production develops and living standards improve, this objectively necessitates that certain farm products undergo transformation in response.

Surplus grain is turned into food for animals. This is the route which all of the developed nations have taken. China has an average per capita grain output of 800 jin. With edible grain consumption basically satisfied, preparations are made to transform whatever grain is left over into domestic animal products and to improve the material conditions of the masses. However, due to quirks in pricing created by the unified and assigned procurement systems, this transformation is made more difficult. For example, according to conventional laws, more grain should mean more pigs. But even with the large increases in grain output in recent years, livehog developments have been slow. In many places the supply has even reverted to a fixed amount. If we look for the causes, the major one is the irrational price differential between grain and hogs, so that hog-raising is not as profitable as directly producing grain.

These shortcomings of the unified and assigned procurement systems can all be summarized in one point: they artificially break off the relationship between the farmer and the market. they infringe on the farmer's autonomy and ignore the roles of laws of pricing and market regulation. The goal of reforming these procurement systems is to create a commodity economy mechanism. It makes the farmer a commodity producer with operational autonomy who carries out production in direct response to market demand and who adjusts production in a timely fashion to changes in the market. It brings in technology and raises quality, with marginal profits on higher sales volumes. It solves the endemic current problem of farm production which does not meet market demands, overcomes the various coordination problems encountered in transforming farm production to the commodity economy, and accelerates the pace of development of rural commodity production.

Since we have been in a situation for a long period in which reforms must be implemented in the unified and assigned procurement systems for farm products, a mindset seems imperceptibly to have taken shape which holds that these systems are necessary in a socialist country, and without them there would be no socialist planned economy. This mindset is incorrect. Unified and assigned procurement were special methods implemented under specific historical conditions wherein farm product supply could not meet demand to plan procurement, allocation, transfer, and distribution of farm products. They are not the general form for socialist planning. In fact, there are socialist nations which have not implemented unified procurement and others which implemented it for a time, after which, as products became plentiful, it was eliminated. Thus there is no direct relationship between the unified and assigned procurement system and socialism.

## II. Conditions Are Ripe for Reform of the Unified and Assigned Procurement System

The unified and assigned procurement system was the product of specific conditions and can only be changed as objective conditions change. From the standpoint of present rural economic development, we have already put conditions for reform into place.

From the standpoint of supply, the goods for which unified and assigned procurement are now in effect are mostly those for which supply is level. Among

these, some major goods such as grain and cotton already pose no procurement problems for the state; rather, the problem is one of selling them for the farmer. The state is not worried about maintaining control of the sources for these products, and unified procurement quotas have already become "superfluous." For the minority of products for which at the present time there is still concern about supplies meeting demand, such as hogs and vegetables, it is not a matter of a lack of production potential, but rather that the price is irrational and farmers have no enthusiasm for producing them. Ignoring the problem of price and abjuring laws of pricing and merely depending on the issuance of unified and assigned procurement quotas will lead unavoidably to a vicious circle in which "the less there is, the more procurement will be unified; and the more procurement is unified, the less there will be." But if nothing is used but the method of raising the procurement price to stimulate production while the unified and assigned procurement modes continue to be used, it will be hard to avoid a situation where "more hogs and more vegetables are a worry." Only by eliminating the unified and assigned procurement system and letting the producer directly confront the market can the two abnormal situations mentioned above be avoided.

Once prices are liberalized, large fluctuations in the overall level of farm product prices will be impossible. The overall price levels for farm products are limited by levels of purchasing power. As long as there are no major changes in purchasing power levels, the overall price levels for farm products cannot fluctuate very much. This is economic common sense. From the standpoint of particular products, the procurement price of most goods for which unified and assigned procurement are in effect have been adjusted several times over the years and are basically rational. Some such goods are beginning to find themselves in a position where the market price is lower than the state procurement price. Once these products are set free, the price will tend to go downward in a stable fashion. As for those few products for which supply does not currently meet demand, after liberalization they may go upward somewhat. But this is rational and, moreover, temporary. Prices have to reflect the price of commodities and the supply-and-demand situation. This is a requirement of the laws of pricing. If procurement is not liberalized for fear that prices will go up--"taking on" the laws of pricing--production will not go up and the only possibility for the market will be "prices but no goods." This benefits neither the producer nor the consumer. Once liberalized, the state can revert to the method of price subsidies to protect the interests of the consumer, and these short-supply items may go up in price at first, but production should develop rapidly, supplies of the product should increase quickly, and the price should tend to reach its own stable level.

After a number of years of adjustment, the range of unified procurement has shrunk. This provides lessons for reform and creates the conditions for it. At the present time, the number of products under unified and assigned procurement has fallen from a maximum of more than 108 to 39 (of which pharmaceuticals comprise 24). Some procurement for those items still under unified and assigned procurement has been relaxed to one extent or another as well. Based on price calculations, the proportion of goods under unified or assigned procurement has fallen from a high of 93 percent to below 50 percent. This being the case, whether it be for the consumer or the producer, there is already an appropriate multichanneled circulation process for goods to get to market on their own.

Some comrades feel that although the current situation makes elimination of unified and assigned procurement feasible, looking at it from the standpoint future developments, it must someday return. The reasoning is that China has a large population and little land. Its agricultural base is not that solid. At some time in the future there may be problems of farm product supplies which no longer meet demand and prices which exceed what the consumer is willing to bear. Based on this assessment, these comrades hold for not making public the elimination of unified and assigned procurement, lest it prove a hindrance in the future. This concern is actually excessive. The long-term shortfalls of farm products in the past were really not due to any lack in farm production potential. Rather it was because policies were not appropriate. One was the "big rice bowl" of the collective economy; another was the overmanagement of the rural economy by the state, which tied the farmers' hands and feet. With the implementation of the household responsibility system in recent years, the "big rice bowl" of the collective economy has been smashed, spurring the development of production. The current ongoing reforms of the rural economic management system, including reform of unified and assigned procurement of farm products, will create further good external conditions for the farmer to develop commodity production. The firm judgment is that farm product supplies can only get better--not worse.

### III. Using Economic Means To Implement Planning Leadership

China has a planned commodity economy. Reform of unified and assigned procurement of farm products and expansion of market regulation does not imply any attenuation of state planning; rather it is a method of changing planning. It places even higher requirements on agricultural planning work. In other words, it really assures autonomy for the farmer in production and exchange, and also makes the production and exchange activities of the farmer fit the demands of a planned commodity economy. The key to achieving this is to master and be adept at utilization of economic regulation methods. We have a strong state-operated economy and control over various economic regulation methods such as pricing, taxation, credit, farm investment, and supply of production materials. At the same time we have a strong state-run commercial system, so that if we can take timely control over the market situation as a basis and are adept at using economic methods, we can surely better attain planning goals.

Among the various economic methods, pricing has a special function; it is the key to the farm product procurement problem. The nexus of reforming unified and assigned procurement for farm products lies in the pricing system. Current overall procurement price levels for farm products are basically rational; but there remain some specific products for which price differentials do not make sense. Price variations between products of differing quality or produced in different seasons or regions remain unaddressed; and the buying and selling prices for certain products are inverted. This creates an extremely unfavorable impact on the production, circulation, and consumption of farm products. The first thing to be done to solve the price question is "adjustment"--that is, to carry out planned price increases or decreases for irrational prices. Second is "liberalization"--to reform price management systems and arrive at prices for products through the market mechanism. Based on several years of successful experience in adjusting buying and selling policies for farm products,

prices for these products should be made as flexible as possible. Excluding those products which impact on strategic or public welfare interests, there should be no nationwide unified fixed price management system. Setting prices loosely and carrying out automatic adjustments in a timely fashion according to market supply conditions is just "small movement with most things staying the same." Excessively unified fixed prices which are adjusted every few years lead to "major movement with little that remains unchanged." This is not conducive to preserving the basic stability of market prices.

Attention must be paid to preserving the farmer's enthusiasm. Once unified and assigned procurement have been eliminated, the farmer will be turning from primarily state-planned production to production which follows market demand. This is a profound change. The farmer should have an appropriate gameplan and will unavoidably have to shoulder some of the risks of market fluctuations. On the one hand, the broad masses of farmers must keep timely tabs on market changes and learn skills in the school of pricing rules. On the other, the state should adopt measures to protect farmer enthusiasm. Because of the basic instability of farm products, there should be a certain guaranteed procurement price for them, so that when the market tumbles, some of the product can be purchased at the guaranteed price. This will give the farmer the necessary backup for his investment and protect his interests. In this regard, it would be better for the state treasury to suffer some difficulties rather than let farmer enthusiasm undergo a setback.

State-run businesses and supply and sales cooperatives should actively participate in market regulation--especially in adjusting commodities and keeping a lid on prices. Currently, state-run and collectively-run businesses comprise over 70 percent of farm product operations. Elimination of unified and assigned procurement in no way implies that these sectors should "take a back seat." Quite the contrary, they should become even more active in their participation. The key is to overcome the attitude of "official business." When unified procurement quotas were issued in the past, "the royal scion didn't worry about marriage," and they would wait for the farmers to bring the goods to them for procurement. Once this is liberalized and there are numerous direct channels of circulation, whoever is best at business will be in charge. In terms of objective conditions, state- and collectively-run businesses have great advantages. All they have to do is conscientiously reform their systems and improve management and they will be able to better shoulder their responsibilities to lead the market--especially in the strong role they should play in keeping a lid on prices.

The contract system should be widely implemented. This system is a good one for integrating autonomous farm operations with the guidance of state planning. By entering order and option agreements, the farmer can understand in a timely fashion both state planning requirements and changes in market demand. The state, moreover, can take timely control over the direction of farm production. This is not only critical to stabilizing the relationship between supply and demand for farm products and reducing the economic losses which market fluctuations hold in store for the farmer, industry, and commerce; it also sets up a reliable foundation for the state planning leadership. Procurement

contracts for farm products take many forms. Besides authorizing commercial enterprises to enter agreements with farmers, any unit which processes, does business in, or consumes farm products can directly enter purchase contracts directly with the farmer. The farmer can also himself initiate sales contracts with units needing farm products through cooperative economic organizations or by setting up producers' associations. The so-called contract under conditions where unified and assigned procurement were in effect in the past were unilateral. In actuality, what was issued to the farmer was a "quota notice." From now on, no matter whether it is a state contract or one between producers and businessmen, all shall be entered into on the basis of equality and consultation. Mandatory orders are no longer permitted. This would amount to another form of unified and assigned procurement. Once a contract has been signed, it should have binding legal effect. Whichever party breaches the contract shall bear the economic liability and pay compensation for damages.

12303

CSO: 4007/333

JPRS-CAG-85-021  
26 June 1985

## AGRICULTURAL PROCUREMENT REFORM STIMULATES RURAL ECONOMY

Beijing NONGMIN RIBAO in Chinese 2 Jan 85 p 1

[Commentary: "Agricultural Development Urged To Be Market-Oriented"]

[Text] The National Rural Work Conference convened by the CPC determined to reform the agricultural product system of centralized and assigned procurement. Under national planned guidance, market regulations should be expanded so that agricultural production can suit the demands of the market. From this year on, with the exception of the necessary individual agricultural products defined by the state, centralized and assigned procurement of agricultural products will no longer be assigned to the peasants. A planned system of fixed quotas for purchasing and marketing will be implemented according to circumstances. There is merit to such a system, since basically it is to respect the peasants' own decisions and choices in production, thus stimulating the rural economy.

The system of centralized and assigned procurement had a positive role in assuring supplies and supporting construction in the past. However, with the development of production, increasing shortcomings appeared which had an impact on the development of rural commodity production and on economic results. It is necessary to carry out restructuring on the basis of the new trends in the rural areas.

The reform of centralized and assigned procurement is a profound change. For a long time, peasants produced mainly for their own consumption and the achievement of the state procurement quotas. The products relied chiefly on the centralized procurement and exclusive selling rights of the related departments of the government, and the needs of the market were ignored. Later, the situation changed, and agriculture shifted gradually from the era in which all production had to be purchased to an era in which products are produced on the basis of market demand. Market demand reflects the needs of the society, which are always changing. Therefore, the masses of peasants, ideologically, must adapt to this new trend so that the goods they produce and manage will respond sensitively to market changes in terms of varieties, quantity, quality, etc. If product varieties are on the right track, their quality good, and the product marketable, profits will be made and development will be furthered. Products that do not adapt to market demand will incur losses or will even be eliminated. Commodity production is a large



school so producers have to widen their vision, have to study and increase their knowledge, have to accumulate experiences in order to master the trade of swimming in the vast ocean of the commodity economy.

Here, an urgent task is recommended for rural cadres: the former methods of forced-mobilization farming, harvesting, and state purchase no longer work. It is necessary to cope with the abrupt turn in rural production as soon as possible. Changes should be made in ideology, style and methods. It is necessary to study hard and to implement boldly. Economic means should be applied to promote economic development; economic information should be applied to guide economic policies and legal means to maintain the economy in order. Comrades engaging in rural work should consciously serve the peasants in order to prepare for the new peaks of rural commodity production.

12726

CSO: 4007/193

NATIONAL

TRENDS IN RURAL COMMODITY PRODUCTION, FUND CIRCULATION DISCUSSED

Beijing NONGYE JINGJI WENTI [PROBLEMS OF AGRICULTURAL ECONOMICS] in Chinese  
No 1, 23 Jan 85 pp 17-20

[Article by Wang Lan [3769 5695], of the Agricultural Bank of China:  
"Changing Trends in Rural Commodity Production and Fund Circulation"]

[Text] I. The Relationship Between Commodity Production and the Circulation of Funds

Commodity production and the circulation of funds change with each other and follow along together. Marx pointed out: "The whole difficulty is that the thing produced from this fact, the exchange of commodities, does not simply act as an exchange of commodities, but acts as an exchange of the product of capital" ("Capital," vol 3, p 196). In the same way, it can be said that under a socialist system, the exchange of commodities does not only act as an exchange of commodities, but also acts as the exchange of the product of funds. The process of commodity production and exchange and the process of fund circulation are intimately connected. Rural commodity production uses the union of the production of value and the production of value, on the one hand, using the production of value to transform the means of production into commodities (when natural conditions have a hand in it); and on the other hand, expressing value as funds and expressing the circulation of value as the circulation of funds.

The intrinsic relationship between commodity production and the circulation of funds has three main points:

1. The scale of commodity production determines the scale of fund circulation. When commodity production develops, the scale expands and the total output value of commodities rises, then the total amount of funds increases correspondingly. Comparing 1983 with 1978, total purchases by society of agricultural and sideline products increased an average of more than 14 billion yuan annually, added to which the output value of town and village industry increased an average of more than 8 billion yuan annually, making a total of more than 22 billion yuan; and at the same time, rural bank loans for agriculture, industry and commerce increased on an average of 12 billion yuan annually. The total commodity increase and the total funds increase generally had a two to one ratio, that is, funds turned over two times. This shows that when the total output value of commodities increases, funds

inevitably increase correspondingly and here, we are only calculating the amount of increase in credit and still have not included the accumulation of the cooperative economy itself.

2. Socialist commodity production is expanded reproduction. The expansion of commodity production requires increased investment. The cycle of commodity production determines the speed of fund turnover, and the structure of commodity production determines the structure of funds and trends in the development of commodity production determine the direction of the flow of funds.

3. The amount and time of the circulation, availability and regulation of funds can also affect the scale of commodity production and the length of the production period. For example, if the amount of available funds is insufficient, it can cause the scale of production to shrink; and if the permeation of funds is not on time, then it can cause a delay in production time.

We must further study the intrinsic relationship between rural commodity production and the circulation of funds by dividing it into levels. The structure of rural production has three levels, one is the farming level, a second is the level of agriculture, forestry, animal husbandry, sideline production and fishery, and a third is the level of the rural economy. And we could also divide the intrinsic relationship between rural commodity production and the circulation of funds into three levels for study.

The farming level consists of grain crops, cash crops and forage crops. Farming production is affected by natural conditions and has a great seasonal nature, and in 1 year can reap one or two harvests. The seasonal changes in the circulation of funds are also very great. Part of the means of production required by farming (seed, fertilizer, etc.) is supplied by peasants themselves and part must be bought through the market, each being about one-half. Aside from the part of grain and oil-bearing crops used by the peasants and stored, most is sold to the state as commodities according to plan, and there is also a small amount that is sold through country fair trade. With the development of commodity production, the commodity rate of farming constantly rises and the scale of circulation of funds can expand correspondingly.

Within the agriculture, forestry, animal husbandry, sideline production and fishery level, the production cycle for forestry, animal husbandry and fishery is fairly long, with varying times ranging from about 2 to 6 years. For example, it takes about 10 years to plant trees and create a forest; some production cycles are fairly short, like raising chickens and fish, etc. At the same time, there are divisions according to the circulation of funds, with long-term turnover funds (circulating funds). Most of the means of production required by forestry, animal husbandry and fishery (seeds and seedlings, young animals, feed, etc.) and the products of production are bought and sold through the market (timber is bought, allocated and transferred by the state). The circulation of funds corresponds to this. The commodity production process is generally divided into three stages; one is

purchasing the means of production, changing monetary funds into the means of production; two is the process of production, processing (or rearing) the means of production and changing them into products that meet the needs of society; and three is selling the product, and realizing the value of the commodity; the commodity is changed into monetary funds.

There should be overall development in industry, commerce, construction, transportation and service industries at the level of the rural economy. We should divide the circulation of funds for agriculture, industry and commerce into the two parts of fixed-asset investment and circulating funds to carry out research, for the laws of circulation of the two are not the same. But in the process of commodity production, fixed funds and circulating funds are combined and perform their functions together. From agricultural production to the purchase, storage (multilevel), processing, transportation and sale of agriculture products, each link continues to move forward and the circulation of funds also continues to move forward.

## II. Changing Trends in Rural Fund Circulation

At present, changing trends for rural funds can be summarized in the following three points:

1. The scale of rural fund circulation is constantly expanding due to the overall development of agriculture, forestry, animal husbandry, sideline production and fishery, the comprehensive management of agriculture, industry, commerce and transportation, the enthusiastic expansion of commodity production by peasants, constantly increasing investment, the adoption of new techniques and equipment to improve the conditions of agricultural production, and the development of rural and small-town enterprises. Not only is there increased demands for circulation funds in production turnover, but the demand for funds for purchasing fixed assets also increases. There is greater and greater demand for funds, and from January to September 1984, credit in the cooperative economy increased 24 billion yuan, an increase of 8 billion yuan over the same period the previous year. At the same time, the sources of rural fund accumulation have also expanded, and in addition to increases in fixed assets and accumulation of goods and materials by rural collectives and individuals the funds required by production and circulation processes have also increased and the funds in banks and credit cooperatives have already reached more than 60 billion yuan. As the relationship between production and money develops, the peasants' relationship of trust with banks and credit cooperatives also develops.

2. Peasant families are both units of production and consumption, and apart from selling agricultural sideline products, sources of income for peasant families also include income from industrial sideline occupations, and moreover, the proportion from industrial sideline occupations is gradually increasing and the profit from rural and small-town enterprises subsidizes farming. Some of the cash and savings held by peasants is used for accumulation funds for production turnover and expanding reproduction and some is used for living expenses and for reserve, with the proportion of the former becoming greater and greater. According to a survey of some

prefectures, peasant expenditures on the means of production are about 50 percent of their total money expenditures. At the same time, the organic components of peasant funds are gradually increasing, input of inanimate labor is increasing and the input of animate labor is diminishing, and now they are changing from purchasing mostly small farm tools, such as hoes and sickles, as in the past, to purchasing mainly small and medium-size agricultural machinery, automobiles, etc. The trend for peasant investment in production is from farming to rearing animals, and from agriculture to processing, transportation, construction, commerce and service industries. With the change in the rural economy toward specialization, commercialization and modernization, the regularities of fund circulation become even more apparent.

3. With the comprehensive development of agriculture, industry and commerce, particularly the great development of rural and small-town enterprise, the seasonal nature of changes in rural funds is gradually diminishing. Total agricultural output in 1983 was 312.6 billion yuan and the output value for rural and small-town industry was over 80 billion yuan. The sum of the two is over 390 billion yuan, and of the total output value of agriculture and industry, the proportion for industry is about 30 percent, and in many areas, it is over one-half, and in economically developed areas, it is over 70 percent. The part of income from rural and small-town industries in suburban counties outside large cities that is used to subsidize agriculture (farming) is gradually increasing. At the same time, with the development of peasant family industries and sideline occupations, the seasonal nature of peasant monetary income is beginning to weaken and is gradually tending toward an equilibrium. Apart from planting, there is little seasonal effect on the production cycle of specialized households, for example in raising chickens, cattle or sheep, etc., and the circulation of funds changes along with the changes in the production cycle. As reflected in rural credit, the seasonal nature of loan balances is diminishing. In 1983, the balance of rural cooperative economy loans was equivalent to over 80 percent of the average amount for the whole year.

### III. Credit Is the Main Channel for Rural Circulation of Funds

The source of funds from rural production and construction is: 1) the accumulation of the cooperative economy itself; 2) the state finance administration and credit support. Among the multiple channels of rural circulation of funds, credit is the most important one.

Actually experience of the past few years shows that when commodity production develops, credit facilities develop. Commodity production is the foundation of credit activity. In the process of commodity production, the availability of funds and the readjustment of credit cannot be wanting. The funding needs for large-scale development of commodity production must be borrowed on credit, and the more developed the commodity production, the more it requires developed credit to service it. The commercialization of agricultural production is predicated upon specialization, and socialization, and socialization also enables tens of thousands of individual scattered commodity producers to develop frequent economic contacts, and agricultural banks, acting

as credit institutions, are precisely this kind of connecting link. Under the guidance of the state plan, and through the readjustment of credit and the circulation of funds, they work in coordination with state-run industrial and commercial enterprises and supply and marketing cooperatives, connecting hundreds upon thousands of commodity producers, promoting production, coordinating supply, production and marketing, promoting the flexible operation of the entire society's production and circulation, giving full play to the "catalytic" role of credit in commodity production and at the same time, giving full play to its macroeconomic role of lever in regulation, control, guidance and coordination of economic activities, and in guiding commodity production to meet the demands of the overall economy. From here on, with the large-scale development of commodity production, the demands for monetary funds will become greater and greater, the sphere of credit activities will become ever broader, and its role will become more and more prominent.

Seen from the changing circumstances of rural credit (banks and credit cooperatives) in recent years, with the development of the commodity economy, the sphere and speed of credit activities have expanded and they have already become the principle channel or rural circulation of funds. The various items of rural savings have increased from 25.2 billion yuan at the end of 1978 to 74.8 billion yuan at the end of 1983, an increase of 44.42 billion yuan and an average annual increase of nearly 10 billion yuan. Various loans have increased from 41.96 billion yuan to 86.38 billion yuan, an increase of 44.42 billion yuan, and an average annual increase of 8.9 billion yuan. It is apparent from the situation of the past few years that savings are greater than loans, at an average annual rate of over 1 billion yuan. If we add in the rural grain loans (an average annual increase of nearly 3 billion yuan), then the average annual increase of loans is about 12 billion yuan, that is, loans are nearly 2 billion yuan greater than savings. Seen solely from saving and loans in the rural cooperative economy, the balance of savings increased from 11.92 billion at the end of 1978 to 57.48 billion yuan at the end of 1983, an average annual increase of 9.1 billion yuan; the balance of loans increased from 14.25 billion yuan to 46.7 billion yuan, an average annual increase of 4.1 billion yuan. In this way, there was an average annual 5 billion yuan excess of savings over loans. The factors creating this situation are very much connected with the seasonal nature of agricultural production. This situation shows that in the past few years, through organizing rural funds, banks and credit cooperatives have tapped their potential to solve the funding needs of rural production and construction and have played an important role in the areas of circulating and regulating rural funds.

#### IV. The Way To Solve the Problem of Rural Credit

The processes of commodity production, exchange and circulation all require credit in partnership with availability of funds, and balance between the needs of rural production and construction for funds and the possibility of fund accumulation, regulation of the proportions between rural accumulation and consumption, and regulating the problem of linking the supply, production and marketing of millions upon millions of commodities. If the rural economy is to develop and if peasant lives are to improve, then we must accumulate.

Regardless of whether it is the funding requirements for production turnover or the need for investment to expand reproduction, all rely primarily on savings by agriculture itself and regulation and advanced payment of credit for the solution. Consequently, my proposal for solving the problem of rural funding is to rely primarily on the savings of the cooperative economy itself along with the availability of funds and regulation of bank credit. In this way, on the one hand, it stresses the spirit of self-reliance as the main thing, relying on the cooperative economy to develop commodity production and to increase savings to solve the problem of rural funding, while, on the other hand, it also stresses the important role of credit in developing commodity production. Speaking from the total demand for rural funds and the total supply, and considering it from the overall development of agriculture, forestry, animal husbandry, sideline occupations and fishery, from the comprehensive management of agriculture, industry and commerce, and from realizing the goal of doubling the output value of agriculture by the end of the century, the balance of funds raised by rural areas on their own cannot meet the needs for developing the rural economy. Thus, support from state finance and credit, and increased input of funding, are required.

As for the bank credit work, to solve the rural funding problem, on the one hand, we must fully tap the potential of rural funding, using every means possible to raise even more funds to support the development of the rural commodity economy and, on the other hand, we must use the funds we now have well, raise the utilization rate of funds to enable them to achieve the greatest possible economic results and allow us to get several yuan's worth of value for one yuan.

#### V. Set up a Multichanneled, Multiform Rural Financial System

My preliminary proposal for further conscientiously implementing the guiding policy of enlivening the domestic economy and opening to the outside and for setting up a socialist rural financial system with Chinese characteristics is for the publicly owned national banks to take the leading position, for collectively owned cooperative financial organs to play the role of nongovernmental borrowing and lending, and moreover, make rural cooperative raising of funds and free nongovernmental borrowing and lending the supplemental, simultaneously coexisting multiple channels of credit and varying forms of credit.

Agricultural banks, as specialized banks of the nation, are suited to the needs of the overall development of the rural economy, and have now already changed from being mainly banks that handle agricultural loans and allocate funds into comprehensive banks that handle various financial affairs in rural areas. Through the economic levers of loans and interest rates in regulating the socialist rural economy, agricultural banks both give expression to microeconomic and macroeconomic aspects, the two aspects being intimately connected. These and the banks' playing the role of economic regulator are all realized in accordance with the demands of macroeconomic policymaking and of the state plan, consciously applying the law of value and taking market demands into consideration.

The task of rural credit cooperatives is mainly to serve the peasant masses and to serve agricultural production. Under the guidance of the state's guiding plans and policies, credit cooperatives operate independently with independent accounting, taking responsibility for surpluses and deficits and giving full play to the role of nongovernmental borrowing and lending. The developmental direction of credit cooperatives should be to go the road of a small-scale organization, immersed in the countryside and close to the peasants, and only in this way will we be able to carry forward the "three natures" (mass nature in organization, democratic nature in administration, and flexible nature in management), flexibly serving the production and standard of living of the people and only then will we be able to realize democratic administration, with the supervision of the masses, becoming a truly cooperative financial organization. Credit cooperatives should not develop into large-scale institutions, should not develop in large market towns and cities and should not develop into operations that cross prefecture or county lines. And even less should they use credit cooperatives to substitute for agricultural banks.

The cooperative raising of funds in the countryside is one necessary form of credit. The Central Committee's Document No 1 for 1984 pointed out that we must encourage various forms of combination in technology, labor, funds and resources. The cooperative raising of funds in the countryside is one form of credit in the rural economy, it is objectively necessary for the development of rural commodity production, it is a joining together of surplus rural labor, technology, resources and funds, sets up the requirements for a new socialist countryside, and moreover, the more commodity production develops, the greater can be the scale of fund collection. At present, the forms of cooperative raising of funds are taking funds into plants, investment by workers and staff of the plant, purchase of shares and payment of dividends, joint management through raising funds by collectives and peasants, etc. The cooperative raising of funds in the countryside is beneficial in enlivening the economy, finding an outlet for surplus labor, and increasing the income of the state, collectives and peasants. Agricultural banks should further relax policies, do a good job concerning availability of funds, expand the scope of credit operations, satisfy to the greatest possible extent the requirements for funds in the developing the rural commodity economy, and at the same time, they must enthusiastically support and correctly lead the movement for the raising of funds in the countryside, aiding enterprises that raise funds to improve economic results in the areas of loans, funding, economics, information, and in opening accounts.

The cooperative raising of funds in the countryside should maintain the principles of doing things in accordance with economic laws and of the voluntary mutual benefit of the masses, and ought not use administrative methods to apportion the task of raising funds. The scope of raising funds should consider objective possibilities and must go forward with strength, and the collected funds should be planned for as a whole, leaving no gap.

Free nongovernmental borrowing and lending in the past was used mainly to resolve difficulties in livelihood, but now are used mainly for the funding requirements of production and circulation and of expanding commodity



production. These changes in free nongovernmental borrowing and lending are intimately connected with the development of commodity production and commodity exchange, and they are a kind of supplement to rural socialist credit forms. The present problem in free nongovernmental borrowing and availability of funds is mainly fairly high interest rates, and this is a reflection of the supply of funds not meeting demand in the development of rural commodity production. We should clearly recognize that differentiating the boundaries between free borrowing and lending and high interest loans cannot make the height of interest rates the sole objective, for free borrowing and lending does not mean high-interest loans. In regard to high interest rates, we should understand the situation in production and management of funding sources, use, and both borrowing and lending, in order to carry out concrete analysis. We should permit the existence of general nongovernmental free borrowing and lending, but we should attack those that use high-interest loans as their main source of livelihood or who engage in illegal operations in accordance with the law. As for the problem of fairly high interest rates in free borrowing and lending, we cannot only adopt administrative methods to prohibit them, but we must use economic methods, and rely on banks and credit cooperatives to adopt various forms, actively organize rural funds, expand the sphere of loans, and aid the peasants in solving the rational funding needs of production, circulation and livelihood. We must master the interest rate situation, using the lever of interest rates to lower the market rates.

12452

CSO: 4007/218

NATIONAL

PROBLEMS IN COASTAL RURAL DEVELOPMENT DISCUSSED

Beijing NONGYE JINGJI WENTI [PROBLEMS OF AGRICULTURAL ECONOMICS] in Chinese  
No 1, 23 Jan 85 pp 12-16, 50

[Article by Lu Wen [4151 2429] of the Chinese Agricultural Development  
Center: "Several Problems in Rural Economic Development in Fairly Developed  
Coastal Areas"]

[Text] China's eastern coastal areas have a fairly high level of rural  
economic development. The situation there today will quite probably appear  
in other areas tomorrow. Inquiring into the situation and problems of  
economic development there will aid in understanding and predicting tomorrow's  
rural trends in other areas.

I. Several Different Kinds of Areas

The economically developed rural areas that I am talking about have the  
following several points as indicators: 1) A fairly developed commodity  
economy; 2) a fairly large proportion of rural and small-town industry and  
commerce; 3) fairly high levels of production technology and of business  
management; 4) the rural people live fairly good lives. Measuring China's  
fairly well-developed eastern coastal areas by this yardstick, we find: the  
Chang Jiang delta, the Zhu Jiang delta, the Jiaodong Peninsula, the Liaodong  
Peninsula and the area near Amoy. These areas each have different  
developmental levels and different characteristics.

The corridor defined by Shanghai's suburbs, Suzhou, Wuxi and Changzhou has  
the most developed rural industry in China, with the industrial output value  
over 70 percent of the total agricultural, industrial and sideline production  
output value; collective enterprises at the two levels of township and village  
(formerly commune and production brigade) are in an absolute dominant  
position, there are very few family businesses, particularly family industries,  
and the administration and management level is quite high.

Because the Zhu Jiang Delta is close to Guanzhou, Hong Kong and Macao, its  
agriculture, forestry, animal husbandry, sideline occupations, fishery and  
rural industrial and commercial transportation are all fairly well developed,  
various economic forms compete in development, much new technology is  
introduced from the outside, various fields are quite active, the develop-  
mental trend is quite vigorous and, seen from the present development trend,  
it could very quickly go to the forefront of China's rural areas.

Rural industry in the Yantai and Ningbo areas is not as developed as that of Suzhou and Wuxi, there is relatively more farming, animal raising and sideline occupations, family businesses have an important position and various kinds of specialized households and new associations are developing quite rapidly.

In the Liaodong Peninsula and the area around Amoy, rural industry is in the initial stage, with emphasis still on farming, forestry, animal husbandry, sideline occupations and fishery. In fairly concentrated adjoining strips of land in central Liaodong, there is a lot of joint farming and households that have contracted out a lot of land, while near Amoy, the land is rather scattered.

In the past, there were many difficulties in northern Jiangsu and the Wenzhou area of Zhejiang, but in recent years there have been major changes, production has developed rapidly and the lives of the people have improved dramatically.

There are also coastal areas with fairly low levels of economic development, such as Cangzhou Prefecture in Hebei, Ningde Prefecture in Fujian, Zhangjiang Prefecture, Hainan Island and the Qinzhou Prefecture of Guangdong. Neither the commodity economy nor industry of these areas is developed, and people do not have high income levels.

Due to the different developmental levels of these areas, here we will concentrate mainly on the four kinds of areas mentioned above, particularly the Chang Jiang and Zhu Jiang deltas, in our investigation of rural developmental problems in fairly developed areas.

## II. Structural Features of Rural Production

Rural industry in most economically developed areas is characterized by the steady rise of industry, which already occupies a major position in the total output value of rural society, and the corresponding decline of agriculture, particularly farming. From now on, the development of an absolute majority of the nation's rural production structure will also go basically in this direction, that is, the tendency for industry's proportion to rise and agriculture's proportion to decline.

Another common feature is that the labor force for industry is small with a high output value, while the labor force for agriculture is large with a low output value. In Suzhou's Shazhou County, 36 percent of the total labor force is engaged in industry yet the industrial output value is 78.4 percent of the total rural output value; 50.1 percent is engaged in agriculture yet the output value is only 14.4 percent. There are price factors in this disparity and it also reflects the reality of surplus rural labor, and seen from China's countryside, the saying that industrial labor productivity is higher than that of agriculture generally corresponds to reality. Extrapolating from the above figures, in the future, on a national scale, we will arrive at a point where, on the average, 30 percent of the labor force will farm and 40 percent will engage in industry and sideline occupations, which

will enable rural areas throughout the country that are not at a middle level of development to reach or even surpass the present developmental level of Shazhou, Jiading, and Shunde counties, the industrial output value will increase to about 70 percent of the total rural output value and this will mean rural industrialization. This is an extremely formidable task.

In addition to these common features and trends, because of the objectively different conditions in each area, their production structures also have some differences.

The rural production structure in the area around Suzhou and Wuxi has prominent features: 1) Rural and small-town enterprises and urban enterprises are basically identical. According to calculations by various Suzhou counties, light and textile industries (using mainly chemical fiber as raw material) account for 63 percent of the total rural and small town enterprise output value, the construction materials industry accounts for 14 percent, the machinery industry accounts for 12 percent and others, 11 percent; 2) the lack of an organic relationship between rural and small town enterprises and agriculture. The output value of industries that serve agriculture is not even 10 percent of the total rural and small-town output value, and the food-processing industry is only 2.16 percent. In the four years between 1980 and 1983, the average expenditures paid to agriculture by rural and small-town enterprises reached 7,026,000,000 yuan, but this was in the nature of an external shot in the arm; 3) agriculture has not achieved the development that it should. From 1970 to 1983, agricultural output value fell from 68.9 percent of the total rural output value to 20.2 percent, and grain yield showed a tendency to decline; generally speaking, this is rational, but it is a bit out of line with local resources and with social needs. We should affirm that the development of rural and small-town enterprises hastens the speed of local rural development, allows about one-half of the labor force to transfer out of agriculture, supports agriculture with large amounts of funds, improves the lives of rural people, raises their scientific and educational level and the ability to produce commodities, and this should be written out in large script. But we must not neglect certain sluggish phenomena that have appeared in local agriculture. These circumstances appear under certain historical conditions: First and foremost, in the past this was a major Chinese grain-producing area with a heavy state purchase task, high costs, low grain prices and little income, and this affected the masses enthusiasm for growing grain. Next is the the primary agriculture products in the Taihu area were all bought and processed by state-run enterprises; very few were run by collectives, and peasants were only able to sell raw materials at low prices. If these two points change, then agriculture and agricultural product processing would be able to develop. And further, these areas are close to Shanghai, and many of Shanghai's machine and textile workers have very close relations with the countryside there. During the 10 years of domestic turmoil, production in large cities fell into a state of paralysis, and the countryside around Suzhou and Wuxi used this opportunity to start up rural and small-town enterprises that were basically similar to urban industry.

Rural and small-town enterprises in the Zhu Jiang delta area in Guangdong did not have as high a developmental level nor was it as widespread as in the Chang Jiang Delta. In industrially developed counties, farming and animal rearing are both developing vigorously. For example, in 1983, Shunde County's industrial output value was 66.2 percent of the total industrial and agricultural output value, and farming was only 7.7 percent, yet its forestry, animal husbandry, sideline occupations and fishery were 26.1 percent. In Hainan County, industrial output value was 63.7 percent of the total industrial and agricultural output value, agriculture was 17.68 percent, animal husbandry was 6.9 percent, fishery was 7.1 percent and sideline industries and fishery were 4.56 percent [figures as published]. The agricultural product processing industry also constitutes a fairly large proportion within town and small city enterprises. These features are closely connected with the fact that the area is close to Hong Kong and Macao. Hong Kong and Macao's demand for fresh and live agricultural products has stimulated the development of local farming and animal rearing; money from Hong Kong and Macao has brought about local commercial development and the introduction of new technology and has promoted technological progress. Guangzhou carried out urban economic reform early on and also brought new life to rural development in these areas.

In recent years some areas have been going a new path and setting up a new production structure in accordance with their own circumstances. For example, Jiangsu's Hai'an County uses its local advantage of having a lot of grain and tangerines to develop animal raising, output value of which is already over 30 percent of total rural output value. They are developing various service industries and processing industries on this foundation and creating a whole production system based on agriculture and animal husbandry. Or another example, the Jiuhu Commune in Fujian's Longhai County developed local flowers, plants and fruits, and on this foundation, engaged in processing, commerce and service industries, and set up a whole production system suited to local conditions. There are many similar examples in other areas.

If we wish to enable China's rural economy to develop, we absolutely must develop a diversified economy, develop rural industry and commerce and other enterprises, enable labor to gradually shift out of farming, enable the proportion of agriculture in various fields to gradually decline, and yet absolutely must not neglect agriculture because of this. Because the more industry develops, the greater the increase in the urban population, the greater the need to supply foods and industrial raw materials in ever-growing amounts and of ever-increasing quality. The development of urban industry also requires a constantly expanding market for consumer products and market for the means of production. And the largest market is the countryside, and the ever-richer peasants are the major purchasers of town and small-city enterprise products. Therefore, at the same time that we develop industry, we must stress agriculture, get a good grasp on agriculture and make agriculture the foundation. This by no means implies that we are to return to the old path, being self-sufficient and engaging solely in agriculture, but rather it means to choose the best and develop according to the situation. Where there is a source grain, we can clear out some of the fields to develop

cash crops with a higher income. Recently, Wuxi made plans to reduce the grain area by 10.8 percent over the next 5 years and change to the cultivation of cash crops bringing a greater income, such as flowers, shrubs, fruit, vegetables and others; using some to change into fish ponds to develop fishery; and some to grow forage to develop animal husbandry and expanding the food-processing industry while expanding the scale of management in accordance with structural readjustments. This is the right direction to go.

At present, rural coastal areas that are fairly developed economically have developed under certain historical and social conditions, and they both have commonalities and also specific characteristics and cannot be fully and indiscriminately copied by other newly developing areas. Newly developing areas should emulate those things in their development that have universality, draw on beneficial experience, and, starting from their own actual conditions, develop agricultural product processing, industries that use agricultural products, service industries and other kinds of production suited to the local area, with agriculture as the foundation, achieving an organic union and creating a production structure in which each field has its own characteristics.

### III. The Administrative Structure of the Ownership System and its Developmental Characteristics

In coastal areas that are economically developed, the original collective economy was quite developed, rural and small-town enterprises were particularly prominent, and the collective enterprises at the township level have had a explosive development in recent years. Yet various rural and small-town enterprises have different characteristics in administrative structure:

The administrative levels of rural and small-town enterprises in the Chang Jiang Delta are large at the top and small at the bottom, with the proportion of enterprises the greatest at the township level (formerly the commune level), followed by the village level (formerly the production brigade), next by the production team, and with family enterprises barely being worth mention. Because the township and production brigade level enterprises are fairly large in scale, taxes paid in to the government and their responsibility to society is also quite large. Added to which is the fact that family enterprises are not developed, the average per capita income is not very high. In 1983, the average per capita income, including family income, for Suzhou was 413.86 yuan. Wuxi's was 407 yuan and Jiading's was 522 yuan. Locally, this situation is called "high output value, large contribution but low distribution."

The administrative structure of rural and small-town enterprises in the Zhu Jiang delta, on the other hand, is small at the top and large at the bottom, and in recent years they have emphasized the development of district and township enterprises and family enterprises. The total industrial and agricultural output value in this area is not as high as that of Suzhou and Wuxi, but the average distribution level of the rural population is quite high, and in 1983, the per capita income of the rural population in counties under Foshan City was 658.27 yuan.

In recent years, both Yantai City in Shandong and Ningbo City in Zhejiang abolished the production brigade level and developed family enterprise. Specialized households developed very rapidly in these areas, and in Yantai they make up 36 percent of the total number of rural households; specialized households in Ningbo increased 46 percent in 1983 over the previous year. There has also been quite rapid development of new economic associations, and in 1983, they had already reached 14,528 in Yantai, a total of 60,096 households. That same year, the average per capita income in Yantai's rural population was 448 yuan.

As for the question of how various administrative levels or rural and small-town enterprises should develop from here on, I have four different suggestions. Some of the suggestions are primarily for the development of the collective economy, continuing to strengthen the rural collective economy and to support the development of various rural operations. Some of the suggestions are for the development of family enterprises. We do not want to again develop enterprises at the township and production brigade level, because they became increasingly separated from the masses, and actually became district and township enterprises similar to two light industrial enterprises. Some suggestions are for developing at the same time, "four horse carts advancing together"; some suggestions stress developing both sides, that is, developing institutional enterprises and family enterprises.

Seen from the actual situation, controlling the development of family enterprises would not be beneficial to fully mobilizing the initiative and enthusiasm of the masses, and would not be beneficial to fully utilizing labor and our numerous resources, and would not be convenient for making good on omissions and deficiencies, nor would it be easy to allow rural people to become rich as soon as possible. This has been amply proven by actual rural reform in the past few years. However, if we only develop family enterprises, then it would make rural enterprises fall into a state of scattered small producers, would lack mainstay enterprises, and would make it difficult to use advanced technological equipment; there would be no assured source for the countryside's heavy social responsibility, nor would there be a source for the local expenditures needed to pay peasants. Moreover, a great many rural and small-town collective enterprises have already developed in these areas and play an important role, and we must not retreat from them. Formerly, rural and small-town collective enterprises had certain administrative defects, such as being cut off from the supervision of the masses, becoming little treasuries of the prefecture, township and production brigade, with cadres arbitrarily shifting and using money, taking more than their fair share, etc., and yet these are still secondary to their positive role, and can be changed. If they all go forward together, then it is difficult to avoid dispersal of strength, and so it is better to emphasize developing both sides at once, while at the same time transforming district, township and production brigade enterprises. In this way, we can concentrate our strength in advancing the mainstay enterprises, spurring on other enterprises and it can also reunite family enterprises in their sphere, serving them and advancing together. In addition, we can also set up new cooperatives and associations and develop a new cooperative economy on a foundation of actively developing family enterprises.

#### IV. Developmental Trends in Land Management

There are two trends in land management in economically developed coastal areas. One is the daily greater equalization of land contracts, becoming more and more dispersed; and the other is toward the concentration of land into the hands of those skilled in farming, and the gradual expansion of the scale of farming. At present, the former is the more prominent trend in most areas.

The trend toward the equalization of land contracts is fairly widespread from the Shandong Peninsula all the way down to Guangdong.

In areas that are fairly well-developed, economically, there is quite a lot of economic diversification and many rural and small-town enterprises, the people's income level is also quite high and so why should the trend for the equalization of land contracts appear? This has some general reasons and some particular reasons. China's peasants have long suffered all sorts of hardships and have viewed the land as the place to settle down and get on with their lives; they hold very strong feelings toward the land, and while the rural and small-town enterprises and other businesses in the economically developed areas are fairly well developed, they have not been around very long and they still run up against many obstacles and dangers. The masses have suffered from leftist influences for a long time and even today there is still a lingering fear, and so they all hold on tight to the land. The land contract period has been extended to 15 years, and the masses' ideas about wanting land are even stronger, for with the time that long, no one can imagine what sort of changes might occur in the meantime, and if they get hold of some land, then they can have room for maneuver, and can be somewhat at ease. This is a general reason for similarities with other places. In addition, there are also some particular reasons why economically developed peasants want land to be equally contracted which simply stated, encompass the following points: 1) Most of these places were past commodity grain bases, with heavy grain-purchase tasks, large base figure, low grain prices and it did not pay to grow grain; 2) to complete this heavy purchase task, it was necessary to increase the multiple-crop index, increase the inputs of both materials and labor, raise the per unit yield and total yield, and not only was there a labor shortage and little income from grain, but there were even sustained losses. Although costs declined slightly and incomes increased a little after the implementation of the responsibility system tying pay to production, compared to other businesses, it still has not achieved very much; 3) the cost of the agricultural means of production has increased in recent years (there has been a 48 percent average increase for 15 agriculturally used means of production), and moreover, they are in short supply, and so it is difficult to sell grain and cotton products, and farming, particularly farming responsibility fields, has become a heavy responsibility; 4) to encourage peasants to farm, most economically developed areas have used the income from rural and small-town enterprises to subsidize agriculture, and this kind of subsidy is becoming ever more numerous and becoming a major responsibility of rural and small-town enterprises. In recent years, the levying of the eight-grade progressive tax upon rural and small-town enterprises, urban economic reform and increased competition for rural and small-town enterprises from urban enterprises has made rural and small-town enterprises face new difficulties, and cadres of district and townships, and



small-town enterprises have had to think about passing agricultural responsibility down to the household level, and letting families adjust the contradictions between rural industry and agriculture and letting individuals share the state's obligation equally.

The development of land contract equalization has objective conditions and also has certain advantages. Because there is not a lot of land, as long as you use after-work time or supplemental labor, you can farm; you can make all the arrangements yourself according to the needs of your own household and satisfy your particular needs for farm products and also obtain crop straw to use as daily fuel; it is convenient to raise animals, poultry, silkworm cocoons and to engage in other sideline occupations and this was perfectly suitable under conditions of self-sufficiency or small-scale commodity production. Some people greatly appreciate and praise this style.

However, seen from the point of view of social and economic development, once this dual occupation small-scale agriculture and after-work production enters a social and economic system with a high level of commercialization and socialization, then its limitations are highlighted and it blocks the development of other production. Our economically developed coastal areas are also close to ports that are open to the outside and to large and medium-sized cities, and the swift development of foreign trade cities and industry has created ever increasing demands on the countryside and on the agriculture of these areas. But for them to supply more and more new, high-quality, and fresh and living agricultural products requires them to compete with international agricultural products and this is not something that can be done by relying on after-work labor or relying on old grannies and children using traditional production methods. It requires that they rely on specialized, socialized, modernized production and management, and this one change will bring with it a whole series of changes and create the conditions for the transformation of dual occupation, small-scale agriculture.

There is yet another trend in the area of land management, that is, the trend toward concentration. And this, too, has several different circumstances.

Yingkou, Haicheng and other counties of the Liaodong Peninsula set three conditions at the time of implementing the responsibility system tying pay to production: not to destroy the productive forces that they already had; not to scatter concentrated connected pieces of land and not to pull back from mechanization. The land contracted by each household was generally in one parcel, or two or three at the most. In 1983 they again readjusted land that was too scattered, with each fang [2455] between 300 and 500 mu, and with several families separately contracting one fang and cooperating to discuss the farming plan; taking care of arrangements for tractor plowing, irrigation, pest control, harvesting, etc, and jointly carrying out mechanized farming. There were many large land-contracting households, and in Yingkou County, households that transferred land are about 5 percent of the total number of rural households. The reason that these areas could do this, objectively, is because they have a lot of land, the vast majority of farm crops are one-crop dry crops, and they have a rather strong mechanized force; and the fact that in subjective leadership, they definitely do not want to scatter the land too much and, moreover, have a fairly good grip on the situation, plays a role that cannot be ignored.

In 1984, Guangdong's Jiangmen City implemented a land-unification program and readjustment linked to long-term contracts, concentrating and connecting outlying fields and poor fields, and inviting tenders for contracts; people engaged in industry and sideline occupations and those out of the country turned in their fields to the brigade to transfer contracts; most land was contracted out according to labor, encouraging people to transfer contracts and to contract a lot. They gave preferential treatment to large contract households, who had priority in selecting parcels of land, preference consideration for handling drying grounds, communication tools, funds, tractor plowing, and planting seedlings; they reduced the task they were to turn in, safeguarded their legal rights and interests, etc, and played an excellent role in disposing of land plots and in concentrating the land in the hands of those skilled at farming. The masses also actively support it. Now, 5 percent of the land is already concentrated in the hands of those skilled at farming, the whole city already has over 20,000 large-contract households, each generally contracting between 20 to 30 mu. Formerly, about 90 percent of the production brigades in Yantai contracted land according to the number of people, but after adjustment, it dropped 10 percent and large-contract households reached 8,000. By August 1984, 99.7 percent of the city's production brigades had already implemented readjustment work.

Because income is high in Shenzhen, adjacent to Guangdong's Bao'an County, due to local work in industry, commerce and transportation, about one-half of the work force has shifted out of agriculture. About 20 percent of the people do not wish to engage in agriculture, about 10 percent of the people with no other skill who wish to contract more land, and about 70 percent neither want to farm more land nor wish to abandon the land and ask seven or eight outsiders to come farm the land. Farms, ranches and orchards have already been set up on about 20.5 percent of the local land, and about 8.5 percent is now farmed by key and specialized households. Both Zhongshan County and Taishan County have a considerable number of people who do not want land.

The above situation reveals the following: 1) In areas with a fairly low economic level, undeveloped diversified economy and little land, peasants all want more land and are willing to abandon the land, yet they also want to concentrate plots; 2) in rural areas that are economically fairly well developed, the vast majority of peasants neither wish more land to farm nor wish to abandon the land; 3) in areas with a lot of land and fairly strong agricultural mechanization, it is rather easy to concentrate plots of land and to develop large farming households; 4) in areas that are close to Hong Kong and Macao, about 20 percent of peasants do not wish to farm the land because there is quite a lot of other income and, moreover, that income is dependable, and so it is fairly easy to transfer and to concentrate land.

It can be seen from this that it will take a very long time for the situation of land contracts being scattered and equalized to change to farms being concentrated in the hands of those skilled at it. It is estimated that there will probably be very large changes in areas that are economically fairly well developed by the end of the century, and that most places will probably reach the point of areas that are currently fairly well developed.

We should not act with undue haste in regard to this problem, yet we also cannot let things drift. It is wrong for some areas to adopt coercive administrative methods, for this would dampen the enthusiasm of the masses and affect their faith in party policy; in various areas, we should create conditions, adopt positive measures and lead the masses in consciously carrying them out. The basic conditions are:

1. Actively developing diversified production in order to create outlets for shifting labor forces,
2. Developing and constructing small market towns, and encouraging peasants to leave the land and settle in cities and towns and providing various conveniences for them.
3. Pushing forward with the transformation of agricultural technology, reducing the strength of agricultural labor forces and raising labor productivity;
4. Making benefits for a certain scale of farming be no lower than or even higher than the benefits of other businesses. In addition, we also need to adopt various measures that facilitate the transfer of land. Some of the methods now being used in various areas are:
  1. Eliminating the state monopoly purchasing task, with some being turned over to collectives and with some implementing a money system, thus enabling contractors to be able to make arrangements themselves for production projects.
  2. Adjusting scattered land into connecting plots, to facilitate planning and the transfer of possession; concentrating reserve fields, remote fields and poor fields and inviting tenders for contracts.
  3. After confirming contract rights and transferring land possession, requiring those who must again farm the land to inform new contractors in advance and then be able to recover the land.
  4. Permitting the transfer of possession under various forms and conditions; permitting contracts that transcend brigades and locales permitting the engagement of others to help farm.
  5. Giving preferential treatment and support to large-contract households and doing a good job with service work in order to facilitate the expansion of production and farming.
  6. Pushing ahead on experiments with specialized brigades such as those that use factories to lead agriculture (that is, the so-called "unification of agriculture and industry").
  7. Strengthening leadership. Doing a good job with coordination and organization work, actively guiding peasants in changing dispersed small-scale production and gradually expanding the scale of production.

NATIONAL

## THEORY, POLICY OF LAND USE TRANSFER STUDIED

Beijing NONGYE JINGJI WENTI [PROBLEMS OF AGRICULTURAL ECONOMICS] in Chinese  
No 4, 23 Apr 85 pp 22-24, 52

[Article by Dong Wozhang [5516 2259 3864] and Dong Li [5516 3810] of the  
Hukou County Managing Station of the Jiangxi Agricultural Bureau: "A Study  
of the Theory and Policy of Transferring Right of Land Use"]

### [Text] I. Theoretical Basis of Land Transfer

The study of land use rights transfer is not merely a question of perfecting the agricultural production responsibility system; it also involves the strengthening of China's system of public land ownership. Moreover, there are the major related questions of implementation of intensive farming, development of commodity production, and improvement of the land utilization rate. How should transfer of land use rights be viewed? I feel that the following three theoretical problems must be cleared up.

1. Land use rights transfer means movement of land use rights. Why should such a transfer occur? Basically speaking, it is a necessary reflection of the fact that China's socialist agriculture is still in an undeveloped stage and the fact that the level of productive forces is fairly low. It is the necessary consequence of the development of production. When the output-related contract responsibility system was implemented, land use was assigned in most places in proportion to population or working population. Once management was divided by households, distribution of land, labor, and capital became imbalanced. As rural policies were relaxed, specialization of production developed, labor efficiency went up, and population and labor force moved about naturally, movements in land use rights became unavoidable. Some households became unable to work the land they had been assigned because of nonexistent or inadequate manpower. Some contracting households took up specialized production in other sectors and so became unable to take care of their lands. Conversely, other contracting households with plenty of labor and a good deal of farming experience did not have enough land to plant. This is the objective factor giving rise to transfer of land use rights.

Looking at the problem from the concrete situation, there is a common thread running through all such transfers: the premise of maintaining the original assignment contract, voluntariness on the part of both parties; no impact on

the contractual relationship between the collective and the farm household; nor any change in obligations of the contracting household to the state or the collective; no increase in burdens imposed by the state; no reduction in income by the collective; and mutual benefit to both the transferring party and the transferee.

2. The split between use and ownership rights for land means that there can be no threat to socialist public land ownership. For all means of production including land, the relationship between usage and ownership rights is one in which usage rights are subordinate to and determined by ownership rights. None of the successive stages in the evolution of land ownership--public ownership by large slaveholders, feudal land ownership, landlord land ownership, capitalist land ownership, small peasant land ownership, or socialist land ownership--had anything to do with a separation of land use rights. Thus, especially under conditions of socialist public ownership of land, transfer of land use rights cannot threaten the public nature of land ownership. The reasons are as follows. (a) With the implementation of the household responsibility system, transfer of land use rights is premised on the terms of the original contract agreement, which is based in turn on collective public ownership of land. Any transfer of land which breached or modified the contract agreement would be disallowed by the collective, with reeducation for minor infractions and forfeiture for major ones. The constitution does not allow any illegal transfer of land in the form of adverse possession, sale, lease, or any other form, assuring that collective ownership of land suffers no diminution. (b) The goal of a transferor in transferring land is not to acquire enhanced compensation but to concentrate strengths for the development of a specialty. It may be that there is a real shortage of labor to till the land, and such a temporary measure, done as an automatic response to objective needs, can resolve to some extent the contradictions which are created by parcelling the land out equally. (c) The broad masses of peasants now since the 3d Plenary Session of the 11th Party Central Committee are unlike individual farmers before collectivization. There exists no element of change from a public back to a private form of land ownership. With the inauguration of large contracts, this becomes even more the case. Farmers have more autonomy in their operations. A disturbance in public ownership of land brought about by land transfers could not possibly occur and should not be feared.

3. Compensated land transfer is different from rental income. From the standpoint of economic relations in the transfer process, there are two forms of transfer. First, there is uncompensated transfer. This means that other than the transferee undertaking to withhold for payment to higher authority whatever was provided for in the agreement, no other compensation is turned over to the transferor. The second is compensated transfer. This means that over and above whatever the transferee has undertaken in the way of withholdings to be paid to the state or to the collective, as set forth in the terms of the contract, the transferee agrees to provide a certain quantity of grain at fixed price or cash to the transferor. Of these two forms, the first occurs in a small minority of cases and the second in the great majority.

Compensated land transfer is construed in a variety of ways. One view is that with the land being owned by the collective, the transferee should not be paying compensation to a transferor. Some have construed the income from compensated transfer as a kind of exploitative income "land rent". This second viewpoint is obviously inappropriate. As Marx pointed out in his discussion of land tenancy: "No matter how unique the forms of land rents, they all have a common characteristic: ownership of land rents is an economic mode realized through ownership of the land" ("Capital," Vol 3, p 717). In other words, land rents are connected to land ownership. They are the exploitative income of a landowner relying on his rights of land ownership and not on his labor. It makes no sense to identify land transfer compensation where land is publicly owned by the collective with land rents under private ownership.

What is the logic to compensated transfers? I feel there are two rationales. First there is the compensation which should be given a transferor for turning over his right to use the land. Every farmer has the right to use a portion of the land owned by the collective. Grain bears one of several prices in China. As a member of a collective, a farmer's relationship to grain is attached to the land. The farmer may transfer the right to use the land which he himself has contracted to work, but he cannot transfer his total rights to enjoyment of the fruits of the land to anyone. The requirement that the transferee household provide rice at the fixed price or else provide the value of that rice at the fixed price plus any difference between the fixed price and the negotiated price should be accepted as reasonable. Second, there is the compensation owed to the transferor farmer for his investment of live or material labor in the land. Responsibility to invest in the land and compensated transfer are legal rights held by every farmer. Marx said, "The advantage of land is that every successive investment brings a benefit, and one which cannot rob previous investments of their effect" ("Capital," Vol 3, p 880). That is to say that it is only through sustained increase in material investment in the land that its fertility can be raised and returns increased. If the land is not cultivated but merely used, and the land is worked in a predatory fashion, this may destroy the ecological balance of farming, with serious consequences. Thus, when land is transferred, the transferor should receive the return on the land from his own investment according to its amount and its effectiveness. This, too, is reasonable. It encourages and protects the farmer's enthusiasm for making investments in the land.

## II. Analysis of Trends in Land Transfer

Land transfer is an appropriate transitional mode for concentrating land and an economic development process. Looking at it from surveys of land transfers in Hukou County, although the number of farmers transferring land has been small and the area concentrated is not large, the role transfer has come to play is a good one, and results have been manifest. First, it helps expand the scope of production, upgrade the level of intensive farming, and spur agriculture toward greater yields and greater income. To a certain degree, land transfer resolves the contradictions which arise from parcelling out the land equally. It creates conditions for rational use of the land and

for exploiting its potential. Second, it helps raise the rural labor utilization rate and promotes the shift of rural labor from agricultural to non-agricultural sectors. Land transfer provides a place for the labor of those who are good at farming. It facilitates all sorts of talented artisans in finding employment. It better combines different kinds of labor with different means of production. It makes the structure of rural labor gradually more rational. Third, it aids in the development of specialized, socialized farming and promotes the shift from self-sufficient and semi-self-sufficient production to commodity production. Land transfer changes the situation in which "every family is assigned some land, and every peasant is a farmer." It accelerates divisions into separate industries, aids in assisting and developing specialized households, opens up diversified operations, and develops commodity production.

Land transfer definitely plays a positive role in actual production. Nevertheless, two tendencies now appearing are worth noting. One is that support for the land concentration trend is less than enthusiastic, and it is allowed to take its own course. Another is the conditions for appropriate land concentration are not being created in a positive way. Things are being spoiled by an excess of enthusiasm. Both tendencies are harmful and incorrect. The central leadership of the CPC has directed with reference to its 1984 notice on rural work that "land should gradually be concentrated in the hands of those who are best at farming." In my opinion, the word "gradually" is qualified to mean that the time-frame is a long one and that neither the wait-and-see nor the strive-for-results attitude is helpful, for the following reasons:

1. The present level of farm production in most places is still rather low. Incomes in other sectors are still unstable. Meanwhile, land, "the mother of wealth" combined with labor, provides for rather stable returns and is the material base the farmer needs to rely upon for his living requirements. For this reason, as long as the farm population belongs to collective economic organizations, each has "social prerogatives" to the fruits of a piece of the land. There are some households who, when they lack the manpower to work the land which has been transferred to them, are still unwilling to relinquish their land use rights for fear that if they lose the land they will have no guaranteed source of grain or no recourse in the face of catastrophe. They maintain that "it is better to let the land lie fallow than to lose rights over it."

2. It is only when there are appropriate demands of production that the scope of land management can reach optimal economic results. Under conditions of household management, weighing the appropriateness of a particular scope of land management depends on the farmer's labor force, production techniques, management capabilities, and available social services. If these conditions are ignored and the scope of management is blithely expanded, we may fall back into the rut of "people's collectivization," with unpleasant consequences. Based on surveys at the present stage, implementation of a relative concentration of land under conditions where there is no hiring of outside help but management is competent, in certain multiple crop hillside regions, 4 to 5 mu per worker as an average is an appropriate scale. For this reason,

large-scale precipitous land concentration is inappropriate. Land contracts extending up to 15 years or longer are reasonable and make sense.

3. Returns on land are certainly stable, but building up the land means a big investment with slow results. If the operating period is short there may be no return on investment or else the return may not make up for the amount of return sunk back into the land. This is especially true this year. With reduced supplies of chemical fertilizers, pesticides, and field covers at fixed prices, increasing the farmer's investment in the land. Moreover, agricultural taxes and withholdings by the collective are assessed according to the plot of land, increasing the burdens on those working the land. So the common perception is that farming does not make economic sense, which in fact is true; "it's hard to make in 10 years on the farm what can be made in one travelling the lakes and rivers." So it is that in some villages there are people willing to put their land up for transfer but no takers. This is an important factor affecting land transfer and concentration of land in the hands of the best farmers.

### III. Policies and Measures for Land Transfers

The situation described above points up the fact that land transfers are an inevitable phenomenon with the development and perfection of the output-related household contract responsibility system and a process in economic development. For this reason, we must formulate responsive policies, adopt necessary measures, follow the opinions of the masses, adroitly guide action according to the circumstances, and create the conditions to assure its healthy development.

1. We must proceed from continuing stability and perfection of the output-related contract responsibility system and make clear the limits on land transfers. We feel that "the five permissions and the five prohibitions" should be made clear. This means permitting no assignment or reduced assignment of land to those without labor to till the soil and those turning to other lines of work while prohibiting unauthorized changes in the terms of contracts made with collectives; permitting compensated transfers, while prohibiting transfers by brokers who make a profit on the transaction; permitting and encouraging reasonable compensation for investments in the land while prohibiting abandonment, non-tillage, or predatory management practices which reduce the productivity of the land; permitting a separation between land ownership and land use rights, as well as land transfers, while prohibiting sale, lease, homesteading, or other non-agricultural uses; permitting employment of outside labor within the limits of policies and regulations while prohibiting similar practices which exceed the limits of policies and regulations. It is only if "the five permissions and the five prohibitions" are noted and supported that the work of land transfer can develop in the proper direction.

2. We must seek through diversified operations to find a way to intensify and extend production, get more and more people to abandon farming to engage in forestry, animal husbandry, and fishery production, and persuade a significant contingent of people to turn to small-scale industries and



services in townships. One point worth considering is that farmers who become laborers, enter commerce, or start services can leave the land without leaving the countryside. Regulations regarding grain arrangements made by households moving to townships should be relaxed somewhat, and permission should be granted for households to "leave the land and leave the countryside" for other places, which will help to allow movement of labor, talent, and techniques from one area or unit to another and assist in promoting development of the rural commodity economy.

3. Development of social services should be given the full green light, which will modify the constraints which affect concentration of land. At the present time, rural capital and technology are inadequate, management assistance and market information are stagnant, conditions for manufacturing, storage, and transportation are deficient, and there are buying and selling difficulties. All of these limit to some extent the concentration of land. For this reason, we must mobilize and organize all types of forces to gradually set up a good commodity production service system to satisfy farmer demands. This is a task which must be adhered to, and is the basis for developing commodity production. It is an indispensable circulation link in cooperative ventures and a major avenue for the state in implementing planning leadership in the rural economy.

4. There should be relative parity in "labor compensation" between the various components of cooperative ventures to ensure that the income of those who work the land is not lower than it is for those in other lines of work. If labor is compensated at a lower rate in farming than in other trades, farmers will inevitably be unwilling to accept land assignments, and relative concentration of land will become so many empty words. For this reason, we must adopt appropriate measures to improve farm income. Three issues are noteworthy at present. First, unreasonable apportionment of burdens on farmers must be stopped and excessive demands on the farmer alleviated, to assure that public expenses in rural areas are reasonably divided. Second, unreasonable methods of fixing outlays apportioned solely on the basis of land must be completely reformed to include the human factor equally with the land factor. Perhaps a portion of these outlays can be taken from the profits or rural township enterprises. Third, the state should draft the necessary laws and regulations which have the political effect of protecting the farmer's legitimate rights and interests and the economic effect of giving them the maximum possible support and preferences, so that the farmer believes that farming can be profitable and remains willing to work the land.

12303

CSO: 4007/342

NATIONAL

TIMBER STANDARDIZATION WORK PROMOTED

Beijing ZHONGGUO BIAOZHUNHUA [CHINA STANDARDIZATION] in Chinese No 1, Jan 85  
pp 4-6

[Article by Dong Zhiyong [5516 2535 0516], Vice-Minister of Forestry:  
"Affirmatively Develop Forestry Standardization Work"]

[Text] Timber is a major indispensable resource for national economic construction and the people's livelihood. Given China's present severe shortage of forest resources and the extremely tight supply and demand situation for timber, strengthening timber standardization is extremely important in promoting rational use of resources, upgrading product quality, affirmatively developing comprehensive timber use, augmenting types of timber products, conserving and rationally using timber, and alleviating the tight supply situation. The present article discusses only three topics: the general situation regarding development of standards for China's forestry industry, the role of standardization in developing forestry, and how to be most effective in timber standardization work.

I. The General Situation and Achievements in Developing Standards for China's Forestry

Forestry standardization work began in China as early as 1950. Once estimates and inspection practices had been unified for the entire nation in 1952, three sets of technical standards were drafted for formal implementation in 1954: "Timber Specifications", "Methods of Timber Measurement", and "Chart of Timber Volume." This gave China a good start in the work of developing standards in the timber production and distribution industries. Major revisions were made in "Timber Specifications" and "Methods of Timber Measurement" in 1958, at which time six national standards were promulgated: "direct timber use"; "raw timber for manufacturing use"; "timber defects"; "regulations for raw timber inspection"; "board timber"; and "bed timber." After subsequent surveys and study, the Ministry of Forestry successively drafted and revised 12 timber standards and 6 standards for man-made board and forest chemical [lin hua 2651 0553] products. By 1965 timber standards had reached 24 in number and had begun to take on the appearance of a system of standards primarily for timber products, which played a positive role in developing forestry production, promoting technical advances, and satisfying usage demands.

After the 3d Plenary Session of the 11th CPC Central Committee, the Forestry Ministry beefed up its management of standardization and enthusiastically moved forward with the work of drafting and revising technical standards. During this period, standards were drafted or revised such as "common sawn timber", "railroad sawn timber", "board timber for crating glass", and "timber for vehicles" and corresponding standards for forest chemicals, forestry machinery, and seedlings, as well as quality standards for basic forestry construction projects. At the end of 1984, there were 217 standards in the various categories--9 times the figure in 1965. Leadership in the work of standardization was given a special boost for many provincial (and prefectural) forestry department bureaus when the State Council issued its notice "Concerning Strengthening Standardization Work", which provides for professionals to take over the standardization work. Movements were especially rapid in a number of factory enterprises, which tackled the work of standardization and quality control in a realistic fashion, expended their efforts in a number of areas, went out to make a name for their products, and aggressively sought brand recognition for high quality products.

Over the last three years, the Forestry Ministry has set up the "Technical Commission For Machinery Standardization for Man-made Board", the "Technical Commission For Standardization of Forestry Machinery", and the "Technical Commission For Timber Standardization" according to developing needs for national timber standardization. Once these three commissions were set up, they proceeded to accomplish a great deal of work and began to gather experience.

As China implements its policy of opening up to the outside, external activities which touch upon some aspect of standardization increase in number all the time. In recent years, the Forestry Ministry through its participation in international conferences and factfinding missions abroad has strengthened its relations internationally and with individual foreign nations, opened up channels, and accumulated advanced technical standardization materials which provide lessons for China in drafting and revising standards and in developing its standardization activities.

In sum, over the past 30 years--and especially since the 3d Plenary Session of the 11th CPC Central Committee--the work of standardizing China's forestry industry has been restored and strengthened and has made impressive achievements.

## II. The Important Role of Standardization in Developing the Forestry Industry

Comrade Zhao Ziyang has discussed time and again the importance of standardization in socialist construction, and experts in the field have published a number of studies. I do not intend to duplicate them here. In short, the time has come for standardization work to be tackled; and standardization must be stressed in a number of areas. The major thrust of technological advance is toward quality and consumption--with the emphasis on quality. Standardization is the key to improving the quality of products. It is the basis for product quality and lays the groundwork for it. Without

standards, there would be no criterion for forestry work. Forestry production and supply would fall into disarray, and our products will continue to be substandard. Practice has demonstrated that standardization holds a position of prime importance in building forestry production.

Forestry is a sector which produces both raw materials and industrial products. The complexity of forestry work stipulates that the task of forestry standardization work will be arduous. Economic revitalization has to depend on progress in science and technology which must be oriented toward economic construction. This requires that we tackle the work of technical progress. We must develop technology, make it our key focus, import it, and manage it as a whole concerted process. Moreover, standardization work is the basis for modernized technological management. Therefore, we must be conscientious when working in this area. Even now, leading cadres in some sectors still make fulfillment of product volume quotas "the bottom line", relegating standardization to the position of "work on the back burner", which is optimal. This outlook is mistaken and must be quickly corrected. There is absolutely nothing optional about standardization work; it has now become imperative. As everyone knows, from the time a tree is a seed or seedling until it is cut, processed, and consumed, there is not a single step which does not require meticulous standardization. So must forest management, cutting, and timber creation. So must timber processing, technology introduction, technological restructuring, and enterprise management. In today's rapidly developing world of science and technology, standardization has become an indispensable tool in all walks of life.

Revitalization of China's forestry industry is a huge task. The work of forestry standardization must be implemented in the spirit of structural economic reform and must cater to the strategic goals which tightly surround forestry development. In this way, as we proceed, goals will remain in sight, methods will be correct, the pace will be coordinated, and we can be vigorous in developing the work of forestry standardization.

### III. Vigorously and Conscientiously Developing the Work of Forestry Standardization

In order to be realistic and conscientious in tackling timber standardization at the present time and over the period of the "Seventh 5-Year Plan", we must in addition to tackling the work of standardization reform pay attention to our efforts in the following areas:

1. Vigorous adoption of international and advanced foreign standards is an important measure in promoting technological advances. This plays a major role in upgrading product quality and moving China's existing industries onto an advanced technological foundation. China's current standards for timber are not just few in number; they are low in quality, outmoded, and ill-suited to the demands of developing international standards. For this reason, more than 40 standards now in effect will have to be reexamined, revised, and approved over the course of the Seventh 5-Year Plan. Twenty-five more standards will have to be newly adopted, and research will have to

be conducted in 20 areas. We must be enthusiastic in our approach to this, and succeed in adopting international standards in the spirit of seeking truth from facts. International standards should be fully or partially adopted as basic standards and conventional practices, so that China's standards are consistent with international ones. This will facilitate technological exchange. Product quality standards would take domestic factors into consideration, adhering to the principles of unification, coordination, and selecting the best. Quality indicators should be set after systematic analysis. We should not indiscriminately copy "the whole swath" of foreign standards; even less should we be content to fall behind and take a "shoestring" approach. We must strive to upgrade standard quality levels and promote technological advances in China's forestry industry.

2. Conscientiously and thoroughly implement product standards and upgrade produce quality. The real essence of our development of standardization is to spur technological advances in the forestry industry and upgrade product quality. In the last few years, raw timber quality and the acceptability rate for sawn timber have not been very high. The reason product quality will not improve is primarily because standards have not been strictly implemented. Technical management and quality control do not improve as a consequence. Japan's industrial enterprises have, through years of actual practice, come up with a whole set of comprehensive quality control methods centered around improving product quality. They have linked standardization closely to quality control and stressed a "focus on prevention." Production and manufacturing are carried out in strict accordance with standards. At the same time they have drafted a whole set of design, workmanship, and work management technical and work standards based upon improving product quality. All plant activities fall within the purview of standardization and quality control. Their products are high in quality and have a good reputation. They compete well in their foreign and domestic markets. We should emulate their methods. We should set up long-term realistic quality control activities within factory enterprises which proceed from such quality control stops as "rational lumbering" and "rational sawmilling," to improve the product acceptability rate.

At the same time, regulatory systems and reward and punishment methods which are effective, technologically advanced, and have real significance should be fully perfected and formulated using industry or special standards as a starting point. They should be thoroughly and conscientiously implemented. All sectors of the forestry industry should proceed in this fashion, so that they are full on-line within the next two or three years, focusing efforts up on improving product quality.

3. Vigorously develop technical inspection training for timber, to bolster and fully equip a force of specialized timber inspectors. Timber inspection is an integral component of standardization work; and timber inspection personnel are the prime force behind thorough implementation of timber standards. Since China began instituting timber standards, the Forestry Ministry has trained a corps of over 3,200 people for the nation's major timber production, distribution, and use sectors. They have spread knowledge about standardized techniques, intensified development of standardization

work, and allowed the thorough implementation of timber standards to proceed smoothly. From now on, the China Technical Commission for Timber Standardization will be integrating technical training with planning and conducting "technical seminars" and "technical training classes" throughout the country in a planned fashion which will focus on timber standardization and inspecting for standards. These classes will zero in on leading cadres in enterprises, standardization personnel, and prime movers in inspection techniques. All provincial (or prefectural) forestry departments (or bureaus) should vigorously develop technical training for inspection personnel and improve the quality of work of inspectors. Especially when new raw or sawn timber standards are issued, they should move quickly to set up classes to ensure that the new standards are correctly and thoroughly implemented.

12303

CSO: 4007/347

NATIONAL

NEW STANDARDS FOR TIMBER PRODUCTION ANNOUNCED

Beijing ZHONGGUO BIAOZHUNHUA [CHINA STANDARDIZATION] in Chinese No 3, Mar 85  
pp 17-18

[Article by Li Jinglin [2621 2529 2651] of the S&T Office of the Ministry of Forestry: "Agricultural and Forestry Standardization: Written on the Eve of the Promulgation of New Timber Standards"]

[Text] The Forestry Ministry was one of the first to develop standardization work, beginning in 1950. In 1952, the former Central Financial and Economic Commission approved and promulgated three sets of technical standards, "Timber Specifications," "Methods of Timber Measurement," and "Chart of Timber Volumes," which were implemented throughout the country. With the adoption of the metric system used internationally for estimating and inspecting timber, China's long history of use of a whole range of feudal, comprador practices (such as Longquan numerals, sand gauges, the firewood foot, the English foot, and the Japanese volume) was brought to a close. In 1954, based on the utilization situation in production at that time, the Forestry Ministry made appropriate revisions in "Timber Specifications" and "Methods of Timber Management," dividing them into four sections: original lengths, raw timber, board timber, and bed timber. In 1958, under the leadership of the former Bureau of Standards of the State Scientific Commission, revisions were made across the board for "Timber Specifications" and "Methods of Timber Measurement" to respond to the needs of industrial and agricultural development. Later on, there were increased numbers of standards for timber types as needs demanded. By the end of 1965, 23 standards had been drafted and promulgated, such as "Raw Timber for Direct Use" and "Raw Timber For Manufacturing Use" (of which 7 were national and 16 departmental standards.) These standards played a specific role in the full and rational utilization of forest resources and satisfaction of consumer needs.

However, no further revisions were made in raw timber standards for around a dozen years. They became outmoded and extremely inappropriate for current production demand. Although standards for sawn timber were revised once, the particulars were simple and crude, quality indicators were very low, and other shortcomings were numerous. The chart of raw timber volumes was a copy of the Soviet version, which practice has shown cannot accurately reflect the real situation for China's raw timber volume. Of special notice is the fact that China is a nation short on forests and timber.

In recent years, changes in the structure of forest resources have been tremendous. The amount of mature forests being used to supply demand is smaller and smaller. Reserve resources are inadequate while the amount cut by thinning of forests is increasing. Development of timber conservation by use of alternatives and current standards structures which focus on lumber types and uses are ill-matched to the nation's current construction requirements. As we understand it, wooden utility poles and pillars are gradually being replaced with concrete ones. Output of wooden boats, vehicle bodies and axles as production types vastly exceeds demand, creating a situation where through a series of replacements, supply does not meet demand. Another example is common sawn timber standards, types, and regulations, which are few in number (2 grades, 6 thicknesses), with quality indicators so low that demand cannot be satisfied, and most must undergo some sort of secondary processing before it can be used. As a result, much timber is lost or wasted. Moreover, there are some lumber types such as raw timber for aviation plywood, and timber for farm boats and temporary utility poles for which only names still exist, having been discarded for all intents and purposes. There are only four categories of special purpose sawn timber--bed timber, cargo vehicle sawn timber, vehicle sawn timber, and sawn timber for crating glass. This is inappropriate for the lumber industry, given current trends in the development of special uses for sawn timber and consumer demands.

For this reason, whether from the standpoint of the tremendous changes in the structure of China's forest resources or of current production and user demand, the current timber standards are at the point where they must be changed. The situation is pressing and action is imperative. In both 1972 and 1980, the former Ministry of Agriculture and Forestry, and then the Ministry of Forestry, set out to revise timber standards. Since timber is a major resource for national economic construction and an indispensable material for people in their daily life, formulation of timber standards is a complicated problem with far-reaching impact and strong policy considerations. Revisions have not yet been completely finished. The State Planning and Economic Commissions both showed intense interest in the work of reforming timber standards and made suggestions concerning principles and steps to be taken. They directed that a draft of standards reforms be submitted by the end of 1983, and made price adjustment proposals with a view toward the best price for the best quality. The State Bureaus of Standards, Supplies and Pricing all supported this work. The party group of the Forestry Ministry made reform of timber standards one of its 1983 priorities, with Minister Yang Zhong [2799 6988] taking a personal interest in the project. A Timber Standards Reform Group chaired by Vice-Minister Wang Dianwen [3769 3013 2429] and composed of relevant professional office and bureau chiefs as leading members was formed. Three drafting groups composed of engineering and technical personnel drawn from forestry institutes, research departments and production units assigned for their familiarity with timber standards were set up for raw timber, sawn timber, and basic standards, respectively. After more than 5 months of detailed surveys and studies in over 100 producer and consumer sectors in 11 provinces (regions), broad solicitation of



opinions from producers and consumers, and review of a wide range of foreign materials on standards, they made a tentative draft of revisions in timber standards. They simultaneously carried out verification checks and sought opinions from departments in the central leadership, with the result that they now have 35 national timber standards and 4 departmental standards in draft form.

The current reform of timber standards is based on helping to cultivate, protect, and develop forest resources, making full and rational use of those resources, and promoting a spirit of conservation and substitution. Attention should also be paid to facilitating production and utilization, helping to improve operational management of the enterprise, and economic returns. This also relates to current trends in international standardization. International and advanced foreign standards should be conscientiously studied and enthusiastically used. For this reason, the features of the new post-reform standards include: proceeding from China's actual situation; appropriate relaxation and strictness; complementarity of complexity and simplicity; economic sense; and safe use. This means not allowing excessive loss of resources, while assuring that standards for quality are improved. For raw timber, all standard denominations other than such special regulated lumber uses as plywood, bed timber, mine timber, and utility poles should be eliminated. The make-up of standards should be based on species, use, and length. The current 19 timber types should be reduced to 7. New standards for special grade raw timber, raw timber for manufacturing use, and raw timber for direct use have quality indicators which are quite high. Species and timber quality requirements for special grade raw timber are very strict and up to international levels. Requirements for grade 1 raw timber for manufacturing use have been elevated extensively from the current grade 1 and basically equal current Soviet national standard levels. Grade 2 has been elevated somewhat while grade 3 timber maintains the level of current standards. Focus for sawn timber standards has been on drafting standards for special uses, which have been increased from the current 4 types to 10 types. There have also been considerable revisions in grade and timber quality standards. Common sawn timber which now comes in two grades and six thicknesses will come in four grades and nine thicknesses; and the regulations for different types have been expanded. There has been a considerable upgrading of timber quality standards for common and special-purpose sawn timber--especially with regard to thickness and width, the largest tolerance for which has been reduced from 5 mm to 3 mm to conform to international standards.

The new timber standards have been drafted in accordance with China's actual forest resource situation, producer and user sector requirements, and have absorbed the experiences of foreign advances as a base. For this reason, we feel that once the new standards have been promulgated and implemented, they will bring good economic returns. First, they promote rational use of forest resources and timber conservation. Raw timber standards eliminate timber types in favor of species and length categories. Sawn timber standards expand type regulation, make lengths and grades more rational, make regulations which are usable, and increase strictness on tolerances. They avoid loss and waste such as the necessity for recutting or reprocessing mixing and

substitutions. Based on rough statistics, if the new standards are conscientiously implemented under conditions in which distribution of resources remains unchanged, the nation can conserve more than 2 million cubic meters of raw timber every year, which is equal to the production of four or five forestry bureaus. Second is the beneficial effect on how much timber producing sectors get and how good that timber is, manufacturing according to demand, parity between supply and demand, and assurances for user requirements. It overcomes the previous abnormal situation in which what was supplied was not what was demanded. Third, they will help promote upgrading of production technique levels and improve operational management within the industry. The new timber standards make for stricter manufacturing margins of error and widen the differences between grades. This is especially the case with the addition of "special grade raw timber" and "special grade sawn timber," which will inevitably lead to a strengthening of technological restructuring within the industry, renovation of plants, and improved levels of management. Fourth, the new standards abandon the old one-method-for-all-circumstances and adopt the international practice of separating needle from broadleaf species, gear use to species, and set separate standards for grade and length. By doing so, further revision of one standard should not have an impact on another. This will aid in making timely revisions in the future and accelerate the pace of standardization.

In order that the new standards may be better and more thoroughly implemented, all levels of leadership must take the implementation work seriously, take control of technological restructuring and plant renovation, and strengthen the work of timber inspection and technical training. Because of changes in reform of standards, product inventories and product names, work in such affected areas as planning, statistics, finance, and resources reporting must keep abreast of developments. At the same time, in response to increases in quality of the new standards, there must be adjustments in timber prices, with implementation of the principle of the highest price for the best quality. Only in this way may smooth implementation of the new standards be assured and can the role of standardization in national economic construction be exploited.

12303

CSO: 4007/348

NATIONAL

#### SELF-MANAGED RURAL ENTERPRISES ASSESSED

Beijing NONGYE JINGJI WENTI [PROBLEMS OF AGRICULTURAL ECONOMICS] in Chinese  
No 3, 23 Mar 85 pp 34-36

[Article by Liang Tianzheng [4731 1131 1767] of the Department of Economics of Xibei University: "Situations and Strategies for China's Rural Self-Run Enterprises"]

#### [Text] I. The General Situation for Rural Self-run Enterprise

Rural self-run enterprises are those industries for which the farmer himself puts up the money and then manages. They have developed under the gradually improving rural economic conditions since the 3rd Plenary Session of the 11th Party Central Committee. They have become a new force in China's rural economy and have come to play a positive role in agricultural modernization.

Prior to 1978 there were no self-run enterprises. In that year, individual farmers in certain locations set up small household factories. As the rural economic situation has gradually improved since the 3rd Plenary Session, a large number of farmers have opened shop under the rubric of "economic coalitions." Because Central Committee policy documents have formally condoned and supported the development of self-run enterprises, a large contingent of them has sprung up like spring bamboos, setting off a surge of farm-run industries throughout the countryside. Developments have been most rapid in the seacoast stretch from Guangdong to Shandong and Hebei. Interior developments in such provinces as Shaanxi and Shanxi have not been slow either, with labor force in self-run enterprises in some counties comprising approximately 20 percent of the total. Obviously, a network of self-run enterprises is just beginning to form now in China's villages.

At the present time, the scale of self-run enterprise is generally rather small. From what information is available already, most of the factories employ between 20 and 100 workers and are capitalized at between several tens and several hundred thousand yuan. From the trade make-up standpoint, most of these enterprises are in such areas as energy, raw material excavation, food, building, construction materials, hardware, and apparel. Products commonly have two special features. First, they require only simple processing before being sold and the production cycle is short. Second, lots are small. Energy and

building materials are trades involved in alleviating bottlenecks in the national economy. The special features of the products of self-run enterprises are related to the limited size of these enterprises, their simple tools, and the fact that most are labor intensive. With their rather limited facilities, it is difficult to carry out multi-stage precision manufacturing, and high-volume production is not preponderant.

The role of self-run enterprise is to increase farm income and provide services to heavy industry. On the former point, self-run industry plays a much larger role than specialized households, which have only the capacity to provide for their own affluence, while self-run enterprises can increase incomes for more people. On the latter, by engaging in production of energy, raw materials, and construction materials, these enterprises help alleviate supply shortages and improve industrial start-up rates. Production of small lots of spare parts solves the continual headache many large factories suffer covering difficulties with spare parts replacement, since these larger factories are usually unwilling to produce them.

All in all, after several years of growth, rural self-run enterprise is beginning to show some punch. From the present standpoint, these enterprises change China's traditional rural economic structure through individual effort and play a major role in spurring rural industrialization and farm modernization.

## II. Favorable Conditions and Hindering Factors for Development of Rural Self-run Enterprise

The birth and development of rural self-run enterprise in China is the result of collective action of both urban and rural economic resources. The appearance of these enterprises was inevitable with economic development and was not solely the result of policy changes.

Three factors played a role in determining development of China's rural self-run enterprises: rural resource formation (labor force, capital, and related means of production), market structures, and resources provided by heavy industry. Of these, rural resource formation was most important.

The 30-plus years of post-liberation rural economic development can be divided into 3 stages. The first was from 1949 to 1957, the second from 1958 to 1978, and the third from 1979 to the present. It was in this third stage that there appeared a large surplus of rural resources, which provided a basis for self-run enterprise. The 1984 low level of relative surplus of farm products in China had three direct results. First was a surplus of resources for production of grain, cotton, and oils, for which the marginal production rate was lower than for other industries, and thus had to be diverted. Second was an increase in farm income. The annual increase in per capita income was up 19.3 percent in 1982 over 1978; and in 1983 it was up 17.7 percent from the previous year. Third was the development of farm production since 1979 predicated on the responsibility system. Although all farm households were better off than before, levels varied from one household to another. These three factors enhanced the

development of rural industry. The remainder from the resource marginal production rate had to be diverted to development of rural industry; income increases gave the farmer the conditions he needed to engage in industry; and the inequalities of capital allowed those with comparatively more to take the lead in opening factories.

Only when there is supply and demand can production go forward and have value and significance. Rural and urban labor, capital, technology, talent, and machinery provision gave self-run enterprise its start; the demands of China's broad markets gave these enterprises a vast arena of activity. One such demand is the construction materials, energy, and raw materials market. From the standpoint of the current consumption rate and demand for energy, there is a severe energy shortage. The same holds true for the construction and raw materials market. China's economy is just taking off, and the market for building and raw materials is huge. A second demand is providing spare parts to heavy industry and filling in some manufacturing links between big factories. As urban industry becomes "high-grade, precision, and advanced," more and more trades and manufacturing links will shift to the countryside; and this market will grow as a consequence. A third demand is the market for consumer products. In previous years China's economic development was slower. Consumer goods provided by industrial and agricultural sectors were not enough; markets lacked consumer goods and even if one had the money there were no goods to buy. Economic expansion has been more rapid in recent years and production of consumer goods by industry and agriculture has been lively. Nevertheless, demand still outruns supply. In 1982 the net income per farmer had doubled from 1978 while the gross agricultural output value had risen only 33.4 percent. Net income in industry went up 30 percent and on top of that employment increased, while the total amount of wages increased 58.2 percent at the same time that gross industrial output value was rising only 32.2 percent. Rapid rises in income brought about consumer inflation; 1981 individual purchasing power for consumer goods was up 65.8 percent over 1978 while sources of consumer goods only increased 53.6 percent. Consequently, there was an increase in consumer demand and market expansion. In addition, with production developments brought about by urban reforms and further improvements in rural production capacity, the arena of activity for rural self-run enterprise should continue to grow. Consequently, future prospects for development of self-run enterprise look optimistic.

Nevertheless, there are some negative factors hindering development of self-run enterprise.

A. Shortages of some fast-selling items bring unfair competition. Fair competition means that all materials are distributed on the basis of the principle of equal opportunity and with all producers having access to the market under market conditions. But owing to the severe shortage of such production materials as coal, steel, petroleum, electric power, and cement, the disparity between supply and demand is very large. In order to assure that the demands of priority construction and priority enterprises are met, the state cannot turn distribution rights for these products over to the marketplace. Consequently, no mechanism for equal competition can be established. Self-run enterprises must continue to compete with state-run enterprises under unfavorable conditions. This inhibits development of self-run enterprises.

B. As urban reforms are carried forward, self-run enterprises will face stiffer competition. Self-run enterprises have been able to develop rapidly in the past two years because of the low level of efficiency of state-run enterprises. As reforms take hold in the management of these state-run enterprises, efficiency will improve greatly. The self-run enterprise faces an opponent which will have advanced technology, superior facilities, abundant talent, and a high level of efficiency.

C. There is still life to the small-scale farm household economy, so that the flow of funds into self-run enterprise will not be hurried. In the last few years the improvement in the rate of growth for farm sideline products has been rather rapid. Up to now, there is no sign of abatement. Moreover, with the procurement policies now being implemented for farm products, the farmer can still make a handsome profit; thus he is in no rush to invest in self-run enterprises.

D. A shortage of entrepreneurs: China's countryside had a natural economy for thousands of years. Farmers have little taste for risk-taking and little understanding of commodity business. The lack of entrepreneurs makes the transformation of resources into industrial productive force a difficult one.

### III. Strategies

A hybrid mode of regulation with "market regulation as primary, supplemented with government intervention" should be selected for rural self-run enterprise. National strategies should be determined by reliance on the requirements of this mode of regulation.

A. Hold fast to the principle of market regulation as primary; implement best distribution of resources: There are two benchmarks for weighing the best possible distribution of resources. One is to maximize the production rate for resources (the resource production rate equals earnings on resources); the second is to equalize marginal production rates for resources. The former assures the most advantageous utilization of resources for the enterprise, while the latter assures the same for society at large. Both are predicated on a market economy. Under market economy conditions, the goal of the enterprise is maximization of profits. Profit realization takes place only through competition, and the impetus to seek profit and the pressure of competition force the enterprise to improve resource utilization rates. The market mechanism takes cognizance of the flow of essential elements and accelerates that flow. Essential elements flow toward those regions and trades where earnings are highest with earnings serving as the lever. The result of the ceaseless flow of essential elements is that marginal production rates for resources are equalized. Thus optimal distribution of resources at both the micro- and macro-level is brought about through the agency of the market mechanism. Conversely, mandatory planning rejected competition and profit-seeking by the enterprise. (The goal at that time was to fulfill state planning directives.) It hindered the flow of essential elements and inevitably led to waste of resources by the enterprise and disruption of resource allocation by society. Maximization of resource distribution was difficult to implement. Consequently, it is only by

sticking to the principle of the primacy of market regulation--that is, full development of a commodity economy--and through management in accordance with the laws of a commodity economy, that optimal distribution of resources can be realized.

Implementation of a regulatory mode centered on the market for self-run enterprise cannot shake comprehensive economic planning. This is because self-run enterprise is small at the present time and cannot muster enough force to do so. The activities of self-run enterprise are hamstrung by overall national fiscal and monetary policies and by the control of large industry. These two large "parameters" constitute a planning constraint on self-run enterprise. Consequently, self-run enterprise develops in the breach between freedom and planning. Freedom ensures the vitality of these enterprises, and planning ensures that they will move within the track of state planning. In actuality, this mode of freedom and planning is the embodiment of a planned commodity economy in the sphere of rural self-run enterprise.

B. The state must necessarily provide favorable external conditions for development of self-run enterprise: The countryside is in the midst of a transformation from a self-sufficient and semi-self-sufficient economy to a commodity economy. The various mechanisms which a commodity economy requires are sorely lacking. The state has a responsibility to provide favorable investment conditions and a favorable environment for development of self-run enterprise. Rural self-run enterprise faces competition from formidable opponents. If the state goes by conventional economic tenets and does not intervene in competition, it will let the marketplace determine who is to get resources, who should control the market, who should survive and who should be eliminated. But rural industrialization and agricultural modernization depend on the healthy growth of this new economic force of self-run enterprise. Consequently, the State must necessarily give self-run enterprise favorable conditions, and should effectuate the following strategies:

1. Formulate the various laws such as corporation law, taxation law, management law, etc., to protect competition and protect the property of self-run enterprises from infringement.
2. The state should allocate whatever funds it can or offer favorable loans, and develop such infrastructures as transportation, building of roads and docks, and establishment of information networks in regions where self-run industries are developing rapidly, investment conditions are good, and potential for development is great.
3. Establish rural money markets and create various banking organizations such as securities exchanges, investment banks, and insurance companies. It should permit free traffic in stocks and debentures and eliminate prohibitions against loans among the people (so-called usury). It should strengthen capital formation potential for self-run enterprises through various methods, speed up the flow of money, and raise interest rates.

4. It should eliminate the 8-step graduated tax schedule and implement tax relief policies. Without a doubt, the 8-step graduated tax is a requirement for the mechanism of equal competition. But self-run enterprises are competing with state-run enterprises under unequal conditions which can be counterbalanced in part. This will assist in the realization of optimal resource allocation. Many self-run enterprises are unwilling to expand their operations, precisely because of the harshness of the 8-step schedule. This hinders the operations of large enterprises.

5. Compensated transfer of real estate should be permitted allowing operators of self-run enterprises and those working the land to become more willing to abandon it and devote their attention fully to operating their enterprises. It will also be conducive to having the land accumulate in the hands of those most proficient at tilling it.

12303

CSO: 4007/331



NATIONAL

STATE, ENTERPRISE RELATIONSHIP ANALYZED

Beijing JINGJI RIBAO in Chinese 29 Nov 84 p 2

[Article: "Correctly Manage Distribution Between the State and Enterprises"]

[Text] The "Decision of the Central Committee of the Communist Party of China on the Reform of the Economic System" says that "Strengthening the vigor of enterprises, particularly the vitality of large and medium-size state-owned enterprises, is the central link in changing the whole economic system that focuses on cities." It also points out that in approaching this central link, we should solve the problem of relationships in two fields. That is, we should establish the correct relationship between the state and enterprises and between enterprises and workers and staff. This is the high-level generalization and summarization of the experience and lessons in China's enterprise management system over the past 30-odd years.

Correctly solving the relationship between the state and enterprises, particularly the relationship between the state and large and medium-size state-owned enterprises, includes organizational affiliations, finance distribution relations, material supply relations and product sales relations, etc. But seen from the successful experience in rural reform and the series of trials and explorations in urban reform, the most central thing is still the need to handle the economic benefit distribution relationship between state and enterprises. For a long time in China's economic management, we have not recognized the definite opposing and independent economic interests, and financially, we carried out the system of unified income and unified expenditures and all eating from the "big rice bowl," and basically, the enterprises' entire profit was turned over to the state, and deficits were subsidized fully by the state; in distribution, they practiced treating both good and bad management of enterprises the same, and treating workers and staff the same whether they did a little or a lot. This created greater and greater enterprise dependence on the state, obstructed the enthusiasm of the workers and staff, made the enterprises' economic results drop and affected the development of a benign cycle in China's economy.

To try to find a rational form for correctly handling distribution of economic benefits between the state and enterprises, for several years we have tried out various methods, beginning with the financial administration of numerous enterprises, and including sharing total profits, sharing total profits plus growth, contracted profit delivery, contracted delivery of profit increments, and substituting tax payment for profit delivery. Actual experience shows that each of these methods has advantages and disadvantages, but comparatively speaking, changing from a system of turning over profits to turning in taxes has a whole series of advantages.

1. It Helps Break Down the Former Distribution System of Unified Income, Unified Expenditures and Everyone "Eating From the Big Rice Bowl": Since implementing the conversion from turning in profits to turning in taxes, when an enterprise earns a profit, it pays income tax on the entire profit according to the stipulated tax rate and a certain proportion of adjustment tax, and all of the after-tax profits remain with the enterprise for it to allocate. If there is a great deal of profit, then it retains a great deal and if there is little profit, then it retains just a little, and if there is no profit, then it retains nothing. Apart from what is stipulated by policy, enterprises must bear the entire burden of deficits.
2. It Helps in Establishing a Stable Distribution Relationship Between the State and Enterprises: After implementing the conversion from profit delivery to turning in taxes, all enterprises with profits pay taxes according to the law, the amount turned in need not go through another house-by-house and family-by-family analysis and assessment and haggling over the rate. Rather, they can fundamentally change the defect of constant consultation and changes in the distribution relationship between the state and enterprises that other methods cannot solve, and so avoid the phenomenon of enterprises protecting their own interests by holding back profits that they ought to turn into the state.
3. It Helps State Financial Income To Rise Commensurate With the Growth in the Economic Results of Enterprises: After implementing tax payments in place of profit delivery, regardless of whether an enterprise's profits are equal to those of last year or have increased, it must pay the same proportion of taxes, and so we can guarantee that the principle will be carried out of the state getting the greatest share of new enterprise profits, so as to strengthen the balance between state income and expenditures and to create the necessary conditions for realizing a basic turn for the better in state finance and the economy.
4. It Helps Reduce Direct Interference by Various Levels of Administrative Organs in the Economic Activities of Enterprises: The implementation of the change from profit delivery to tax payment clarifies in legal terms the economic relationship between the enterprise and the state, which is primarily to pay taxes to the government, no longer turning in profits to

upper level organs. Thus the direct economic interest relationships between enterprises and between enterprises and local administrative organs have been severed, obviating governmental interference in the production management of businesses for its partial interests.

5. It Helps Rationally Solve the Economic Relationships Between Department and Region and Between the Central Government and the Local Area: After implementing the change from turning in profits to turning in taxes, no matter whether central government enterprises [zhongyang qiye 0022 1135 0120 2814] or local enterprises, all must turn in the same kind of tax revenue to the local government, and there no longer will be a distinction among government departments with regard to enterprises. The financial system between the central government and the local areas can change to one that is differentiated by the kinds of tax and proportions of tax revenue, thereby bringing a rather good resolution to the long-time defects that existed, such as separation between upper and lower levels and regional blockages.

6. It Helps in Fully Mobilizing the Enthusiasm of Enterprises for Increasing Revenues and Reducing Expenditures: After implementing the change from turning in profits to turning in taxes, the amount of economic benefit that enterprises themselves can earn is determined entirely by the amount of profits that they themselves realize. The more profit an enterprise realizes, the more it can retain; and in the opposite case, it is reduced proportionally. This serves to effectively increase enterprise motivation and pressure to consciously develop production, reduce consumption, raise economic results and increase profits.

7. It Helps Make the Economic Leverage of Tax Revenues Even More Effective: By implementing the change from turning in profits to turning in taxes, the state can rationally adjust the irrational phenomenon of wide gaps in profits rates for enterprises arising from non-operational causes such as resources, prices and technological makeup, through rational adjustment of enterprises and encourage progress, spur on the backward and urge on enterprises to develop competition under generally similar conditions.

8. It Helps Further Extend the Distribution Autonomy of Enterprises: Since implementing the change from turning in profits to turning in taxes, the economic benefit relationship between enterprises and the state has already been determined through legal forms, and if enterprises do not turn in taxes on time and in the proper amounts, then the situation will be handled through fines or legal sanctions. In this way, we will have the prerequisite for further expanding the distribution autonomy of the enterprise. And within enterprises, they have begun to pursue various kinds of economic responsibility systems, with the contract system as the primary form, allowing the amount of wages and bonuses for workers and staff to increase right along with the increased economic benefits of the enterprise and thus creating a close relationship between the

individual income of the staff and workers and both the economic health of the enterprise and the size of the contribution of the individual and implementing no cap and no minimum guarantee for bonuses, with the state only collecting taxes appropriately on bonuses that exceed norms. Moreover, they will gradually arrive at a point where the number of staff and workers, the form of work and the methods of wages and rewards is decided by the enterprise. We must truly reach the point of rewarding diligence, punishing sloth, rewarding excellence and punishing low quality and must thoroughly overcome egalitarianism in distribution within enterprises.

To sum it all up, the great advantage of implementing the change from turning in profits to turning in taxes is that while correctly handling the problem of distribution relationships between the state and enterprises, it both applies the basic principles of rural reform and also pays due attention to the different characteristics of the urban economy. The implementation in the countryside of various different kinds of responsibility systems tying pay to production has allowed workers to know "to turn in enough to the state, hand over a sufficient amount to the collective and the remainder is all his own." This distribution style which has fully mobilized the enthusiasm of the peasants can be--and moreover, should be--applied in urban reform. Yet in comparing the city and the countryside, because the character of ownership is different, one glaringly different characteristic is that the large and small portions in distributing benefits to the state, collective and the individual and the greatness of the effect on state financial income are exactly opposite. Of net agricultural income, generally not quite 5 percent is turned in to the state, about 10 percent is for the commune and brigade collective and the individual peasants receive over 85 percent, and so the great portion clearly goes to the individual peasant. And yet of the total profits of urban commercial and industrial enterprises, over 80 percent is turned in to the state and generally, the portion left for the enterprises and its staff and workers does not reach 20 percent, and so the largest portion clearly goes to the state. At the same time, of the total estimated financial income of the state, in general, not 3 percent comes directly from the agricultural sector, and its proportion is very small, and the portion that comes from urban commercial and industrial enterprises is as high as 80 percent or more. Consequently, when the countryside implements reform, the state's portion will increase or decrease slightly, and neither will greatly affect the overall balance of state finances or the whole national economy, and it could be possible for the state to solve the distribution relationships between the commune and brigade collective and the individual commune members, directly adopting the responsibility system tying pay to production. In urban reform, even if state income can maintain last year's level, it still will not be able to grow along with the increased economic results of enterprises, because various expenditures will inevitably grow, and can bring great difficulties to the balance between state finance and the whole macroeconomy. Therefore, when applying the principle of the rural responsibility system tying pay to production to urban economic reform, we must first and

foremost emphasize the proper handling of the relationship between the state and the enterprise, and in implementing various internal, after-tax contract economic responsibility systems for enterprises, we must seek out a distribution form that is capable of guaranteeing that the benefits for the state, collective and individual grow basically at the same pace. In the past few years, the actual experience of large numbers of enterprises clearly shows that the change from turning in profits to turning in taxes is precisely that kind of very good [distribution] form.

In his report on the Sixth 5-Year Plan made at the Fifth Plenum of the Fifth NPC on 30 November 1982, Comrade Zhao Ziyang clearly pointed out that "the orientation of changing from turning in profits to higher levels to turning in taxes to higher levels should be affirmed." Starting 1 June of last year, we began the first phase of implementing the change from turning in profits to turning in taxes. That is, both taxes and profits will coexist, and have already achieved obvious results. Starting in 1979 when we began expanding the authority of enterprises on a trial basis, we repeatedly stressed the simultaneous growth that there should be in enterprise production, profits and profit taxes but which had not yet been realized, and from newly increased profits, we must guarantee the requirement that the state receive the greatest portion, and this was achieved for the first time last year when more than 28,000 enterprises implemented the change from turning in profits to turning in taxes. At the same time, the enterprises' benefits and the income of the workers and staff increased by an even greater amount than the amount turned in to the state, showing that the benefits of the state, collective and staff and workers are beginning to truly achieve equal consideration. This is a major indication that the national economy has already gotten on the path of healthy development. Consequently, starting this October, we started the second phase of the reform changing from turning in profits to turning in taxes, that is, the transition from the coexistence of turning in both taxes and profits, to changing completely from turning in profits to turning in taxes. The resolution passed by the Third Plenum of the 12th Central Committee, made changing from turning in profits to turning in taxes a prerequisite for pursuing various kinds of economic responsibility systems within enterprises and further affirmed this reform. To guarantee the healthy development of the reform of the whole economic system, with emphasis on urban areas, and to bring about a rational resolution to the distribution relationship between state and enterprise, we must conscientiously and thoroughly implement the concrete plan of the State Council regarding the second phase of changing from turning in profits to turning in taxes.

12452

CSO: 4007/125

TRANSPROVINCIAL AFFAIRS

RURAL INDUSTRIAL DEVELOPMENT TRENDS DISCUSSED

Beijing ZHUANYEHU JINGYING BAO in Chinese 2 Mar 85 p 6

[Article by Li Xingjia [2621 5281 4471]: "Initial Explorations of Rural Industrial Development Trends"]

[Text] Recently, when engaged in a survey of a few counties in Jiangsu and Zhejiang regarding problems in rural industrial development, we found out that with developments proceeding in the contract responsibility system in these two provinces and the opening up of diversified operations on a broad scale, there have been new developments in rural industry which amount to the appearance of a new trend.

This new trend manifests itself in the following 3 areas: 1) The rural feed industry is beginning to grow. Jiangsu plans to open a commune-run feed factory with a yearly output of 2,000 tons in 3 to 5 years. The province's 1,920 communes together can produce 400 tons of compound feed per year. Developing the feed industry will result in annual production value which may hit 1.2 billion yuan. 2) Rural food processing is just unfolding. In Jiangsu, Yangzhou's municipal rural food industry output value has nearly quadrupled in 3 years, and 1990 projections are that output will be 10 times that in 1980. Based on estimates of the 1982 gross agricultural output value for the two provinces, the food processing industry has potential development to 10 billion yuan, with capabilities for constructing 5,000 rural processing factories each with an output value of 2 million yuan. 3) Rural building materials industry will surpass the old leaders. At present, the building materials industry in the two provinces has an output value better than that for the state-owned industry, occupying over half the gross rural and urban output value. There are 7,475 commune-run building materials factories with over 320,000 workers. Jiangsu's fire-resistant building material output constitutes 46 percent of the national total, while glass stands at 32.7 percent.

The developments in rural feed, food processing, and building materials are clearly moving toward local accumulation of funds and cooperation. These three industries play an important role in the nation's two transformations and are bound to become three pillars of China's rural commodity economy. Nevertheless, due to current problems with ideological understanding and management systems, there are still many problems and difficulties with these three industries which must be solved. From the standpoint of these two

provinces, we feel that what is urgently needed is study of macroeconomic measures to deal with these problems and bring wholesome development to these three industries.

The first problem which must be solved is financial management. Financial management (credit borrowing and revenues) is a major factor impacting on developments in these three industries, and rural areas must have financial safeguards if these three industries are to develop. However, at present these industries have only farm loans to rely upon. The sluggish trickle of this channel will obviously never be able to solve the basic problem. Jinhua, Zhejiang has recently seen 3 years of relatively rapid growth of its food processing industry. One major lesson has been that the city put up 560,000 yuan from various sources and the agricultural bank put up 1.14 million yuan to create a financial package which was quite solid. By comparison, Changzhou and Hai'ande in Jiangsu, and Shaoxing in Zhejiang, had food processing factories which despite their objective needs due to large-scale production and advanced technology, had insufficient funds to get going. As a result, they had to settle for production under crude conditions.

Taxation is another important economic lever for developing rural industry. From the present standpoint, this "mainstay" is not being used very imaginatively. Rural feed industry development is just getting started, and the scale of this industry in the future should be considerable. Profits are comparatively small. The profit margins for most of these rural food businesses is extremely low. Once taxes and costs are accounted for, for example, Shaoxing's rice wine factory earns almost no profit at all, while the average profit on Jinhua ham is 1 yuan each. Since profits are so low, many communes are unwilling to go into food processing, and a precious resource is wasted. For this reason, looking at the rural commodity economy from the long term angle, rural industry taxation should not "cut like a knife"; rather, some distinctions need be made. Lowering taxes on low-profit items among the products of the food processing, feed, and building materials industries will help support their development. In addition to this, certain industrial and commercial departments should be prohibited from charging hidden expenses which do damage to the profits of an enterprise. At present some industrial and commercial management departments are only out for their own share of enterprise profits. If this is not stopped, it will become an obstacle to development of these three major rural industries.

12303

CSO: 4007/303

# AFFORESTATION PROGRESS DETAILED

Shijiazhuang HEBEI RIBAO in Chinese 4 Jan 85 p 1

[Article: "Afforestation Work in Hebei Achieves Breakthroughs"]

[Text] In 1984, in spite of severe drought conditions, the work of afforestation in our province had comparatively excellent results. During that year, the total acreage of afforestation was 6 million mu, a figure that exceeded the estimate in our plan by 1.7-fold, and also an increase of 1.75 million mu when compared with the previous year. In 1984, the acreage of the planted seedlings was 428,000 mu, which was an increase of 78,000 mu more than the previous year. In the planting of trees that surround plots of land, 180 million mu was covered, which represented an increase of 1.2-fold over the previous year. The quality of the afforested timber had also improved and according to a report, more than 90 percent of the planted trees had survived. Moreover, improvements had been made in all the areas of cultivating agricultural fields, building woods, and in the greening of cities and towns.

Last year, under the general loosening of policies, the system of the individual assumption of responsibility was put into practice in the afforestation industry, too. As a result, rural workers were encouraged to plant more trees, and household orchards and gardens were also increasingly cultivated, helping thereby the faster growth of afforestation. According to only partial statistics, the total acreage that was planted by rural workers last year was 3.76 million mu, which was 72.4 percent of the total area of afforested land. The acreage that was planted with surrounding trees was 110 million mu, which was 61.1 percent of the total corresponding figure. The acreages that were planted by the rural workers also greatly exceeded those of the cooperative and joint economic units.

Following the technical advancement and accumulation of building experience in the afforestation industry, the various regions have begun to pay attention to the development of afforestation in the three-dimensional structural mode. For the channeling of water, Dong village of Jin County was widely promoted as having complete usage of their land in having cultivated fields, forests and gardens. Therefore, between both agriculture and afforestation, the three levels of timber (and fruit tree) and tall forest planting, irrigation and grass growing (for farming) have been structured into the three-dimensional mode. The measure of having both a high rate of afforestation



and abundant agricultural production has also thus been carried out. At the same time last year, several villages set up their own small preliminary three-dimensional agricultural models. A number of new enterprises that are related to the economy of the afforestation industry or technical organizations have also emerged, such as afforestation insurance companies, afforestation service, planting, and orchard-pruning companies. They are all the results of the development of the afforestation industry.

12740

CSO: 4007/208

JPRS-CAG-85-021  
26 June 1985

# CHANGES IN COTTON PRODUCTION PROMOTED

Shijiazhuang HEBEI RIBAO in Chinese 1 Jan 85 p 1

[Article: "Promotion of High-Yield Cotton Varieties and Readjusting Planting Area"]

[Text] The cotton yield of Hebei Province in 1984 again broke all previous records and was estimated to be 2 billion jin. Up to the present, 1.58 billion jin of this yield has already been sold to various regions. Under these favorable circumstances, the responsible committee members in the province recently suggested that some of the policies be changed. In the past, the goal as regards the cotton crop had always been to go after total quantity of yield, while the aspect of quality had been ignored. From now on, the quality of the high-yield cotton crop should be widely promoted and, at the same time, the total acreage of crops should also be appropriately regulated.

In the last few years, total cotton acreage in Hebei Province continued to increase, resulting in a corresponding increase in the annual production of the crop. In 1983, the total yield of pimián, i.e., ginned cotton, that was sold in the whole province reached 1.5 billion jin, reaching for the first time a per-mu yield of 100 jin. However the last few years, most of the cotton planted was Lumian No 1, i.e., Shandong cotton, which is not suitable for weaving the finer cotton yarn. In 1985, therefore, Hebei Province has determined to widely promote the planting of a variety whose quality is comparatively finer than Lumian No 1, namely, Gongmian No 8. According to the plan, more than 7 million mu will be planted with this finer variety, which will also eventually replace all Lumian No 1. Moreover the various areas in the province will also be encouraged to develop according to their natural climatic, soil, and water conditions, the planting of Gongmian No 1, 4, and 7, varieties that are even more superior.

At the same time, Hebei also decided to restrict the planting of cotton in regions where high-yield cotton and grains had previously been produced, especially in the areas from Beijing to Ganshan, and along the railway tracks from Beijing to Shanhaiguan. As a result of the new policy, these areas close to such big cities as Beijing, Tianjin, Baoding, and Shijiazhuang would be engaged in developing urban and suburban types of agriculture. More vegetables and grains will be grown and grain surplus will be converted to meat, eggs and milk production. However, in the Heilonggang basin where the

salination of the soil is especially severe, cotton has brought new wealth to the rural workers, since the natural conditions in this region are especially amenable to that crop. Therefore, Hebei has not attempted to reduce the acreage of the crop there and at the same time, active help has been given to both strengthen its production and develop processing industries for it.

12740

CSO: 4007/208

# RURAL, TOWNSHIP ENTERPRISES SHOW GAINS

Shijiazhuang HEBEI RIBAO in Chinese 6 Jan 85 p 1

[Article: "Total Income of Rural, Township Enterprises Up"]

[Text] In 1984, the total income of rural and township enterprises in Hebei rose substantially, reaching 10,070,000,000 yuan, double that of 1983, constituting 50 percent of the gross agricultural income. The annual income of the rural and township enterprises in our province has also exceeded the total income that was derived from the cities and counties, which was 100 million.

A noticeable characteristic in the development of the rural and township enterprises in our province has been the management that is accomplished through different levels, models and channels. The meaning of the popular saying, "Without labor, there will be no wealth; without commerce, there will be no living," has been well taken by the people. As a result, both the cadres and the masses have greatly revived the rural and township enterprises in order to multiply their income and they have also diversified into enterprises other than agriculture. Therefore, while they might have stopped working on their land, they have remained in the rural areas and have become engaged in industries, construction and transportation enterprises. Many cooperative enterprises have been organized in the rural areas and villages, by both collective and individual organizations. Within just 1 year, the capital funding of the agricultural workers had amounted to more than 1 billion yuan and over 40,000 new enterprises have also been developed. Moreover, with the development of rural and township enterprises, and correspondingly in the enterprises between the cities and rural area, between the centrally controlled or collectively managed, and between the collective and the individual, further cooperative ventures of different structures and models have also emerged. By the end of 1984, the cooperative enterprises in the whole province totaled 2.13 million. In many of these enterprises, the policy of jointly producing the "one dragon" is practiced, with its "head" being in the county, its "body" in the rural village and its "tail" scattered throughout hundreds and thousands of households.

In 1984, the total number of technical and skilled workers that were employed in the rural and township enterprises reached more than 310,000. There were also 20,000 enterprises that were based on the use of advanced

technologies. Therefore, the rural and township enterprises, when placed in competition with the centrally managed enterprises, would be in a position of advantage that may be summed up as, "We have what you do not have, and what we have is also better and cheaper than what you have." Now the goods produced by our rural and township enterprises have already reached more than 6,000 types; and among these, the production of coal, minerals, bricks and cement, as well as agricultural subsidiary products, are all significant in our national economy.

However, an important key in the further acceleration of the development of our rural and township enterprises is the improvement of the service industry that the different leaders in the units as well as the cadres have been trying to accomplish. In their work, many of the cadre leaders in the cities and regions have let their personnel gain experience from other regions in such issues as opening up communications and channels and thereby the rural and township enterprises' road to the future is being paved.

12740

CSO: 4007/208

JPRS-CAG-85-021  
26 June 1985

# TAX POLICY TO AID FODDER INDUSTRY

Shijiazhuang HEBEI RIBAO in Chinese 1 Jan 85 p 2

[Article: "Favorable Policy Applied to Fodder Industry"]

[Text] The government of our province has decided on a policy of accelerating the development of our fodder industry, as an important element in its general policy of reviving industry. The goal is to greatly increase the production of both of our fodder and animal husbandry industries.

Our government has pointed out that the rapid development of the fodder industry is also the fastest to improve and accelerate our animal husbandry industry. It is also an important means of realizing a benign cycle of agricultural production. The total production of compound fodder in our province in 1985 will thus double that of 1984, and the production in 1990 will triple that of 1985. This policy will apply to the national, collective and individual levels, with energy focused on small-scale enterprises, the collective economies and the cooperative ventures--all aimed at joint development by the masses at different levels, and through different channels and ways. At the same time, the policy should be implemented with suitable planning, scientific research and technological application, in order to advance the quality of our fodder industry.

However, our provincial government has also included the influence of economic results in their consideration of the policy on the fodder industry, thus it has decided on the following concrete measures: Beginning from 1985, all new fodder processing enterprises (including expansion projects) will be exempted from any taxation for 3 years from the day when their investment is made right through their construction phases. Moreover, at the end of the 3 years, if the enterprises run into any financial difficulties, then they may apply for approval for lower rates of taxation up to certain durations. Regarding the existing fodder industries, they will only be taxed for their profit at half the normal rate before 1990. Moreover, regarding both existing and the newly established enterprises, special low-interest loans will be made available for their development or for application of new and important technologies. For the development of important items in any fodder enterprise, after approval by the financial, banking or supervisory units, funding may be provided by the financial units. Moreover, the enterprises of such products as food, chemical industry, brewery, medicine, slaughtering

and aquaculture, i.e., those that are engaged in the processing of products which rely on the fodder industry, will also be exempted from business-profit and seasonal taxations for 5 years. On this voluntary and cooperative principle, the fodder-processing industries will actively develop cake fodder. Some of the regions will then be able to exchange part of their high-quality chemical fertilizer for the cake fodder made by the masses. As a result, the fodder will have a higher protein content, therefore the measure of returning benefits to the land will be carried out. The value of the fodder must be considered in terms of high quality and low interest, but with great consumption. Based on this value system, both the production and management of the fodder industry will be actively running. As a result, much benefit will be brought to the related specialized industry of animal husbandry and other enterprises.

12740

CSO: 4007/208

## NEW RURAL MACHINERY HOUSEHOLD TRENDS REPORTED IN HUBEI

Beijing NONGMIN RIBAO in Chinese 4 Jan 85 p 1

[Article: "The Developing Trends of Rural Machinery Households"]

[Text] The concerned departments of Hubei Province have carried out investigations of some rural machinery households in Chongyang, Tongshan and Yangxin counties. The investigative situation indicated the following developing trends of the rural machinery households of Hubei Province:

1. There was a rapid increase in the proportion of individual households operating machinery. The individual households operating tractors in Chongyang County made up 66 percent of the county's total number of self-owned tractors. The percentage for Tongshan County was 82 percent.
2. The ownership and the management rights of medium and small agricultural machinery increasingly became unified. On the one hand, a large amount of collective-owned machinery was appraised for the operators; on the other hand, most of the newly installed machines in the rural areas were purchased by the operators. For example, in Tongshan County, 82 percent of the tractors and 45 percent of the automobiles were owned by the operators themselves.
3. The rural machinery households selected what they would operate on the basis of economic results. At present, the highest is transportation machinery, followed by the processing machinery and farming machinery.
4. The investment enthusiasm of the rural machinery households ran high. Wang Xiankang [3769 6343 1660], a machinery household of Yangxin County, owned 12 farming machines worth 11,000 yuan, and contracted 1,150 mu of shoaly land. He also planned to invest and run a foodgrain-processing factory this year so as to increase the value of his foodgrain.
5. Some machinery operators gradually became "peasant entrepreneurs." The machinery-operating households had the knowledge and courage to accept innovations quickly. Cai Qianbing [5591 0051 3521] of Yangxin County grouped 15 people (among them, 8 were handicapped) to set up a welfare factory that mainly repaired agricultural machines; concurrently, the factory also processed galvanized iron and rendered other services. Under his enterprise, the worker's highest monthly pay was 70 yuan. Cheng Zhengqiu [4453



2973 3061] of Chongyang County operated a bamboo- and wood-processing factory which was developed from a machine-processing factory. During peak seasons, he employed 30 persons; during off-peak seasons, he only employed 5 persons. The net profit made in the first half of last year was 15,000 yuan.

Editor's Note: It is encouraging that a new trend has developed in the rural machinery households. All related departments should pay close attention to such changes by adopting the effective measures and should support the development of the machinery households. Particularly in the agricultural machinery output department, great efforts should be made to open up markets and to produce more suitable and marketable products to meet the new demands triggered by the new trend.

12726

CSO: 4007/193

HUNAN

## RAPID GROWTH OF PRODUCTION IN STATE FARM INDUSTRY REPORTED

### Output Value Doubled in 5 Years

Beijing ZHONGGUO NONGEN [STATE FARM AND LAND RECLAMATION] in Chinese No 2,  
24 Feb 84 pp 21-22

[Article by Qiu Yixing [6726 5065 2502], Chief of the Hunan Provincial State Farm Bureau]

[Text] The 85 state farm enterprises of Hunan Province are scattered in various of lake areas, hilly areas and suburban areas. The total acreage is 2.72 million mu, the cultivated acreage is 1.03 million mu, and 90 percent of the acreage is in the fertile soil areas surrounding Dongting Lake which produce abundant rice, cotton, sugarcane, fish and hogs. However, during the 10 years of turmoil and chaos of the "Cultural Revolution," sabotaged and influenced severely by the "left" ideology, the efficiency of state farm operations sank very low and losses surged, total losses for the whole province amounting to 128 million yuan. The guidance and policy of the party since the Third Plenum of the 11th CPC Central Committee have illuminated a road from readjustment and retrenchment toward recovery and have enabled the provincial farming and land reclamation projects to reverse losses into profits for 4 consecutive years. In 1983, despite the natural calamities of rarely seen cold waves, hailstorms and floods, agricultural and industrial sideline productions still achieved an overall increase, chiefly owing to the effectiveness of the family contract responsibility system. The gross value of agricultural and industrial production reached an unprecedentedly high level. It increased 9.6 percent above the record high of 1982 and increased to 430 million yuan from 208 million yuan in 1978. Within 5 years the gross value of agricultural and industrial production has doubled and registered an annual growth rate of 15.57 percent in the period.

To what can the doubled production within 5 years and profits in every year be attributed? It is attributed to the continuously improved economic responsibility system which revived the enthusiasm of the employees; to the realignment of the internal economic structure of the farm and land reclamation projects which developed the production of consumer goods and lifted economic efficiency; to the S&T knowledge which enhanced the growth of productivity.

The farm and land reclamation economic responsibility system in Hunan Province starts from "five-fixes one-award" [wuding yijiang 0063 1353 0001 1162] to contract to production brigades, groups, and then to each worker and each family and to vehemently promote production specialized families. Now, with the newly introduced experimental family farms, the economic responsibility system has developed into a new stage. Following the economic development of farms the income of employees is growing year after year. In 1983, the average income of employees rose to 600 yuan per year, an increase of 68 percent over 1978.

The realignment of the internal economic structure of farm and land reclamation projects has developed the production of consumer goods and raised the economic efficiency. The province has made adjustments in four areas: (1) Building industrial plants around the farms to set up material production bases and to develop multilevel processing industries. By doing so four "one-dragon lines": sugarcane planting, sugar processing, winemaking and paper mill (or fiber board plant); fruit, cannery, fruit juice, tea production; tea processing; beans, bean meal (or feedstuff processing), hog farms, and fish farms have been established. The implementation of the new structure illustrates that it facilitated the transformation of a single-line material producing status and its single production into a profit-oriented production operation and accelerated and the pace of industrial production, consequently there were large increases in production value. The aggregate industrial production value of the province has grown to 190 million yuan in 1983 from 70.08 million yuan in 1978 and more than doubled. (2) Understanding market information and accordingly adjusting product lines and promoting the construction of production bases for export products. While trying to manage the best of grain production, we also took advantage of the environment of each locale to promote the production of hogs, fresh fish, Hunan lotus, canned food, Hunan lotus starch, seedless watermelons and other items which have an export advantage. Lean pork hogs for export sell at a 30 yuan premium above domestic market hogs, so we exerted extra efforts to improve the breed of hogs for the lean pork export type. Among the 300,000 hogs brought out of the farms 150,000 are export hogs, which is 25 percent of the total hogs raised in the province, and which increased our income about 3 million yuan. (3) Expanding the production bases of nonstaple foods according to the needs of people's standard of living. On the one hand, we increased our fish-farming area from 130,000 mu to 150,000 mu and developed and built fish ponds of 15,000 mu so that we increased our supply of fresh fish to the cities from the 6 million jin of 5 years ago to 10 million today. On the other hand, we also developed a dairy industry and 90 percent of the fresh milk supply to large cities, such as Changsha, Hengyang, Hongjiang and others, is from the state farms. (4) Taking advantage of the nature of the land at each locale to change crop planting to crops with higher economic efficiency. In 5 years the low cotton-producing acreage has been reduced by 100,000 mu, but in the meantime sugarcane acreage has increased to 180,000 mu. Sugar production alone does not yield high economic efficiency, therefore using molasses to make wine, using bagasse to make fiber board or paper to achieve a multilevel

production process to increase production value, and as a result the total final production value of the sugarcane produced on 1 mu can reach about 800 yuan, which is about fivefold the production value of the low production-value crop being replaced. The province also gave back 20,000 mu of waterlevel lowland to the lake on which to plant Hunan lotus. In 1983, there was a lotus harvest of 3.5 million jin with a yield of 7.9 million yuan, threefold the production value of the original crop being replaced. In 1983, the province's aggregate farm and land reclamation agricultural production value reached 240 million yuan, an increase of 110 million yuan over 1978.

Scientific and technological knowledge has enhanced productivity growth. We did priority research on planting technology to promote the new sugarcane cultivating technique of using land film. Each extra unit of cane cultivated by this method yields one more ton per mu on the average in 10 to 15 days less time. We stressed the breeding of new varieties to replace old ones. In this respect, we cultivated the new variety of cane, datong [1129 6639] 75-178, which ripens 10 days sooner than the nayin [4780 0603] 310 variety with a 1.7-fold higher sugar yield and production 18.4 percent higher. In addition, we also promoted the cultivation of a better variety of rice and in 1983 we expanded the acreage of hybrid late rice to 126,000 mu which was about one-quarter of the total late rice acreage. The hybrid variety had a harvest 102 jin more per mu than the regular variety and increased the total harvest by 1.2 million jin.

Our practical experience has amply proved that in pursuit of economic efficiency promotion, the economic responsibility system is the initiator, multilevel operation is the breakthrough point, science and technology nourish the growth of productivity and consumer goods production is the new motivating force. "Contracts" can cure laziness and produce wealth; realignment has shown its prowess and produced efficiency.

#### Hunan State Farm System

Beijing ZHONGGUO NONGEN [STATE FARM AND LAND RECLAMATION] in Chinese No 2, 24 Feb 84 p 22

[Article: "Introducing Hunan's State Farms"]

[Text] Hunan Province has 85 state farms, among them 46 are food grain farms, 20 are fruit farms, 12 are tea farms and 7 are animal farms. The total population on the farms is 450,000 and among them 216,000 are employees and workers. The total acreage of the farms is 2.72 million mu, and of that 1.03 million mu is food grain land, 57,000 mu is fruit orchard land, 38,000 is tea plantation, and 180,000 is wet fields. The farm system has a total agricultural machinery of 290,000 horsepower, among them there are 1,200 large and medium tractors and water pumps of 100,000 horsepower. There is 520,000 mu of land with an assured harvest in either dry season or waterlogged season, about 50 percent of the total food grain land. The system has fixed assets of 300 million yuan and liquid assets of its own of 100 million yuan.

The province's state farms are small in size, but more in number and scattered in wide areas. From the edges of Dongting Lake to the hill regions of Hunan, from the western Hunan mountainous region to the Hunan-Jiangxi border areas, state farms are in 15 different jurisdictions throughout the province.

The Dongting Lake region is the main location of the state farms of Hunan Province, with 15 farms around the edges of the lake. These farms have a total food grain farm land of 936,000 mu, or 90 percent of total food grain farmland in the system, have yielded 80 percent of the system's production value and profits, and are the major component of the farm and land reclamation economy of Hunan Province. On the edges of Dongting Lake there are given by favorable conditions mother-nature: the land is flat, the climate is moderate, the rainfall is plenty, and the hydraulic works are in good shape; all in all, these conditions are suitable for rice, sugarcane, cotton, Hunan lotus and other crops. The acreages of rice, sugarcane and cotton are in the proportion of 5:3:2. In addition to the crops, there are relatively developed animal husbandry and fish farming, which explains why Hunan has been known for centuries as "the land of rice and fish." The major state-run industries, such as sugar refineries, paper mills, and fiberboard mills are all on the farms in the lake region. At this moment, the preliminary foundations of sugar production, fish production and export hog production have been laid.

The hilly and mountainous areas have 53 farms which are mainly located in the western Hunan cold mountains and the Southern Hunan hills. They are suitable for growing tea and oranges, or other such perennial economic crops. These farms are the major production areas for tea and oranges in the system.

There are 14 farms near cities and they have a total cultivated land of more than 30,000 mu. Their principle function is to provide vegetables, milk and fresh fish to the cities and these products are their major production; 90 percent of the fresh milk supplies to cities such as Changsha, Zhuzhou, Xiangtan and Hengyang depends on these farms.

In the last few years, especially since the Third Plenum of the 11th CPC Central Committee, the state farm and land reclamation projects have recorded rapid development: 1983, in comparison with 1978, total food grain production increased 33.9 percent despite the reduction in farming acreage; the sugarcane harvest reached 650,000 tons, an increase of 103.5 percent; the fresh fruit harvest increased 146-fold, full-grown hogs increased 36.4 percent; machine-refined sugar reached 38,000 tons, a 2.94-fold increase; and machine-made paper rose to 20,000 tons, a 1.23-fold increase. Aggregate industrial and agricultural production value has grown from 208 million yuan in 1978 to 430 million yuan in 1983, it has doubled in 5 years and registered an annual growth rate of 15.57 percent.

12787  
CSO: 4007/159

## PEANUT CULTIVATION REPORTED EXPANDING

## Peanut Acreage Continues Expansion

Xi'an SHAANXI RIBAO in Chinese 18 Nov 84 p 1

[Article: "West Bank of Yellow River To Become Peanut Production Base"]

[Text] In response to market demand and taking advantage of its geographic conditions, Shaanxi Province has experienced a rapid growth in peanut acreage in the last 2 years. In 1978, there were only 70,000 mu last year there were 170,000 mu and this year there are about 300,000 mu according to a recent estimate. In the near future there will be 2 million mu and the vast area on the west bank of the Yellow River will become a large-scale peanut-producing base.

According to a study by experts, the soil, sunshine time, accumulated temperature and rainfall of most parts of the province are suitable for peanut growing and Shaanxi can be a major peanut-producing province in northern China. Chinese consume only 7.5 jin of peanuts per capita per year which is far too low to satisfy demand. In Shaanxi, the average peanut supply per capita is only 1.3 jin, which is far below the national average. Based on the planting experiment conducted in some areas of northern Shaanxi by the agricultural technological promotion agency the average yield in flat low land is in the range of 500 to 700 jin per mu and the average yield on terraced land is in the range of 400 to 600 per mu. At the Mizhi County experiment station the highest yield per mu is above 1,000 jin. With the use of land film covering, the average yield per mu can be increased 200 to 300 jin. Because of high yield and good income, peasants are willing to plant peanuts and their enthusiasm in peanut farming is very high. Weinan Prefecture plans to plant 500,000 mu of peanut next year and the whole province will have more than 700,000 mu next year. The Provincial Multilevel Operation Leadership Unit Office has suggested to the Provincial People's Government to gradually develop a 2-million-mu peanut-producing base along the west side of the Yellow River in anticipation of exporting peanuts and peanut products to other northwestern provinces and regions and foreign countries.

## Peanut Production Praised

Xi'an SHAANXI RIBAO in Chinese 18 Nov 84 p 1

[Commentary: "Broaden Vision, Make Plans for Agriculture"]

[Text] The peanut-planting area on the west side of the Yellow River has expanded rapidly. This is important economic news. It illustrates that since the 3d

Plenum of the 11th CPC Central Committee our peasants, having satisfied their own needs for food and clothing, are opening up their vision of the narrow concept of producing for self-sufficiency to the concept of producing for the market. This is the vision of a consumer goods producer and an evolution of the economic concept of the peasant.

Under the new situation of the rapid growth of rural consumer goods production and the market-oriented vision of the peasants, when we study the agricultural structure and contemplate agricultural strategy, we must have the sense of the market and the sense of consumer goods and consciously use the principle of value to better lead the peasants to vigorously produce various high-quality processed agricultural products according to the most urgent demand of the people and to take best advantage of local conditions.

For this reason, providing the peasants timely and accurate market information of the whole province, the whole nation, and the whole world is a task of utmost importance. The news of expanded peanut planting on the west bank of the Yellow River and the prospect of supplying peanuts and peanut products to the northwestern provinces and regions and foreign countries is without doubt important economic information to the vast number of peasants. We look forward to developing the 2-million-mu peanut-producing base on the west bank of the Yellow River and also want our provincial economic structure to become more responsive to domestic and foreign market demands and more efficient economically with each passing day. In the meantime, we also understand that to achieve this goal we must rid of ourselves of the stigmas of the little peasant's subsistence farming concept and step forward to open up our vision and liberate our ideas.

12787

CSO: 4007/155

SHANXI

## PROPER WINTERIZING OF WHEAT FIELDS URGED

Taiyuan SHANXI RIBAO in Chinese 27 Nov 84 p 1

[Article: "It Is Imperative To Improve Wheat Field Winterization Management; Vice Governor Guo Yuhuai Delivers Speech on Wheat Production to Date"]

[Text] Very recently Vice Governor Guo Yuhuai [6753 5940 2037] pointed out that from the beginning of the winter wheat field management had not been under firm control, progress is slow, and in some locales watering and topdressing of fertilizer have not started yet. This year the summer drought was severe and the subsurface moisture in wheat fields was too low in general. Even though there was heavy rain in the southern part of the province just before sowing, the rain water still did not reach the subsurface moisture. The subsurface moisture and surface moisture in Jinzhong, Luliang and Jindongnan prefectures were still far from adequate. Wheat fields in certain areas with stubble plowed back in to the soil suffered severely from insufficient fertilizer, some of them already showing brown seedlings. Therefore, it is urgent to put a tight grip on the management of winterizing wheat fields.

Vice Governor Guo urged all locales to effectively carry out the following instructions:

1. Strengthen leadership, broaden vision, and establish new strategic targets for wheat production. The aggregate wheat production of the whole province is now somewhat more than 5 billion jin, which is a fundamental improvement in the supply and demand situation of processed grain but not a solution to food supply at a higher level; the demand for wheat production is still huge, and the commodity rate is still not high. The wheat production of the whole province must aim at a goal of "over 10 billion jin," a very difficult task. Therefore, unconcerned loose attitudes and blind optimism must be eliminated and good follow up work after good sowing must be diligently pursued to achieve an even larger wheat harvest next year.
2. Seize the moment to improve winterizing management. This year the quantity and quality of the winter topdressing of fertilizer, the winter watering of the wheat, and the winter harrowing of the field must be done better than the average of previous years. Plastic film covering must be used extensively on the three types of wheat fields and on late-sown inferior wheat fields. The government agencies concerned must step up their technical assistance and teach peasants the proper techniques.



3. Management of wheat winterizing service work must be properly organized. The water resources and electrical power agencies must prepare for the wheat winter watering and for expanding the watering acreage. Chemical fertilizer, insecticide, sales and marketing, farm loan, and production supplies agencies must prepare themselves to provide goods and services to guarantee that all measures are smoothly implemented.

12787

CSO: 4007/155

SHANXI

BRIEFS

OVERALL BUMPER HARVEST REPORTED--The Provincial Statistical Bureau released good news: This year the agricultural production of the province registered an overall bumper harvest. The preliminary estimates are: food grain, 16.7 billion jin, an increase of 3.6 percent over last year; cotton, 231.02 million jin an increase of 20.1 percent over last year; oil-bearing crops 550.07 million jin, an increase of 15.9 percent over last year; hemp crops, 6.58 million jin, an increase of 79.8 percent over last year; beets, 592.26 million jin, an increase of 8.1 percent over last year; tobacco, 8.01 million jin, an increase of 4.4 percent over last year; vegetables, 4,395,380,000 jin, an increase of 4.1 percent over last year; herbs with a production value of 64.51 million yuan, more than double the value of last year. Since the beginning of this year, Shanxi Province has suffered various natural calamities and the damaged area is as much as 40 million mu, about 70 percent of the cropland of the province. More than 70 counties and cities have suffered from various degrees of drought, hail storms, floods and storms, with a few locales suffering 50 to 60 percent damages. Nevertheless, because of effective implementation of the instructions of the Document No 1 of the party Central Committee, the hard work of the contracted farm families, the meticulous management, and the introduction of new farming techniques, the resistant ability against natural disasters has been much improved and most farm households have increased their production. The overjoyed and surprised peasants say unanimously that this year we had good harvests in spite of bad weather; we liken the contract system to mountains of gold and silver. [Text] [Taiyuan SHANXI RIBAO in Chinese 12 Nov 84 p 1] 12787

SPECIALIZED GRAIN STORAGE HOUSEHOLDS EXPANDING--This reporter has learned from the Provincial Conference of Experience Exchange for Specialized Grain Storage Households which concluded on 29 November that in 1984 the specialized grain storage households in Shanxi have expanded to more than 2,000. Up to date, these specialized households have stored 634 million catties of grain for the state, about one-quarter of Shanxi's total grain put into storage. Zhang Yusen, a peasant of Xizhonghuang Village of Xiangfen County has stored 1.87 million catties of grain for the state and is by far the largest specialized grain storage household in the province. With respect to the current situation, there are three types of grain storage arrangement with these specialized households: The first type is complete storage service--the storage household provides the storage facility and equipment. After the government agency has inspected the quality of the grain and assigned a grade to it, it is weighed into the storage. Then the storage household takes over full responsibility for the quantity and quality of the grain. The state pays a certain storage fee and the remuneration

is higher. The second type can be called semistorage service--it only provides the storage facility and equipment and is only responsible for the quantity of the grain in the storage. The pest- and mold-control measures are left to the government food agency. The remuneration to this type of household is half of that to the complete service type. The third type is that the village provides the storage facility and equipment collectively and appoints personnel charged with storage supervision, the government agency is responsible for the control of quantity and quality of the grain in storage. The remuneration is negotiated between the village public and the workers involved on the basis of voluntariness and mutual benefits. [Text] [Taiyuan SHANXI RIBAO in Chinese 6 Dec 84 p 1] 12787

CSO: 4007/155

Agronomy

AUTHOR: ZHAO Jubao [6392 5112 1405]

ORG: Laboratory of Agrometeorology, Chinese Academy of Agricultural Sciences,  
Beijing

TITLE: "The Effects of Meteorological Factors on Soybean Yields in the Central Part of Jilin Province"

SOURCE: Beijing ZHONGGUO NONGYE KEXUE [SCIENTIA AGRICULTURA SINICA] in Chinese  
No 1, 20 Feb 85 p 17

ABSTRACT: Based on soybean yields and meteorological data from 1961 to 1980, meteorological factors and soybean yields in the central part of Jilin Province were analyzed quantitatively with the integral regression method and stepwise regression technique. The conclusions are as follows:

1. There was a close relation between meteorological factors and soybean yields with a highly significant multiple correlation coefficient of more than 0.84.
2. Precipitation, sunshine and temperature are the factors influencing the soybean yield, among which precipitation was shown to be most important. The effect on soybean yield of meteorological element distribution in a particular time seemed to be more important than that in the whole growing period.
3. The effects of meteorological factors on soybean yield were divided into four time intervals:
  - 1) The effect of precipitation from sowing to emergence of seedling stages is a positive one. 2) During the seedling stage, the effect of sunshine and temperature is positive, but that of precipitation is negative; the maximum negative effect of precipitation in this stage reached 0.3-2.1 jin per mu. 3) A decrease in soybean output was caused by high temperature, too much precipitation, and lack of light from the blooming to pod setting stages. 4) The effect of precipitation and temperature from the pod filling stage to maturity is positive too.
4. In order to get a stable high yield of soybeans, it is necessary to apply agrotechnical measures suitable to the local climate such as preserving soil moisture, early sowing, field management, rational irrigation, and other agricultural technical measures.

CSO: 4011/24

Crop Science

AUTHOR: ZUO Dakang [1563 1129 1660]  
XU Yuexian [6079 6390 0341]  
CHEN Deliang [7115 1795 0081]

ORG: Institute of Geography, Chinese Academy of Sciences

TITLE: "An Analysis of Field-Water Budget of the Main Crops on the Low Plain in Hebei Province"

SOURCE: Beijing DILI YANJIU [GEOGRAPHICAL RESEARCH] in English No 1, Mar 85 p 29

ABSTRACT: According to the observed data of water consumption (E) of the main crops in the prefectures of Shijiazhuang, Xinxiang and Dezhou and in Beijing, the evapotranspiration coefficient of crops ( $\alpha$ ) in Penman's formula is determined by calculating evaporativity from the water surface ( $E_o$ ):  $\alpha = 0.78$  for winter wheat,  $\alpha = 0.72$  for cotton and  $\alpha = 0.78$  for corn. A formula,  $E = \alpha E_o$ , is adopted to estimate water consumption of the crops in their growing period in the low plain of Hebei Province. The estimated water consumption is as follows: 400-470 mm for wheat; 613-708 mm for cotton and 350-405 mm for corn.

In successive rotation of wheat and corn, the annual amount of water deficit in wheat fields is about 242 mm, while in monoculture, it is reduced to approximately 164 mm. Water deficit for one-crop farming of cotton and corn amounts to 107 mm and 39 mm respectively.

Water deficit for winter wheat in Cangzhou and the eastern part of Langfang exceeds 180 mm, while it is less than 140 mm in Handan and southern Xingtai. The area seriously affected by water shortage are located in southern Changzhou and the western part of Xintai and Hengshui. As for Wenan, Dacheng and Qingxian counties, water deficit becomes less serious.

From April to May is a period of the highest water consumption of wheat and the sowing time of cotton and other spring sowing crops. But in this period precipitation is the lowest. Therefore, a complementary amount of water is required for irrigation.

CSO: 4011/21

Crop Science

AUTHOR: CHEN Qifeng [7115 0796 6912]

ORG: Fujian Agricultural College

TITLE: "Cropping System in China"

SOURCE: Fuzhou FUJIAN NONGXUE YUAN XUEBAO [JOURNAL OF AGRICULTURAL COLLEGE]  
in Chinese No 1, Mar 85 p 10

ABSTRACT: This paper is a brief introduction to the fundamental concepts, important effects and the formative processes of the cropping system. The characteristics, experience, theory and tasks of the cropping system in China are also discussed. Lastly, suggestions for the further development of cropping science are advanced by the author.

CSO: 4011/20

Hydrology

AUTHOR: WANG Jiaqi [3769 1367 4359]

ORG: Nanjing Hydrology Institute, Ministry of Water Conservation and Electric Power

TITLE: "China's Maximum Records of Storm Duration-area-depth Examined"

SOURCE: Beijing SHUIWEN [HYDROLOGY] in Chinese No 1, 25 Feb 85 pp 44-45

ABSTRACT: Measurements of rain duration and maximum rainfall at a given location are generally expressed in a main depth versus duration relationship; the data show the maximum rainfall values at different locations, thus aiding in estimates of rainstorms and the heaviest possible rainstorm. The article analyzes 930 rainstorms for their duration-area-depth data. Following the United States, China is the second country keeping duration-area-depth data for the heaviest rainstorms. Two of three tables in the article give this data for storms lasting as short as 1 hour to as long as 7 days for individual locations and areas from 100 to 100,000 km<sup>2</sup>. The other table shows the U.S. rainstorm data as converted into km<sup>2</sup> for comparison with the Chinese data. Generally, the Chinese data are smaller for 1 through 24 hours of storm duration and for areas with 300 to 1,000 km<sup>2</sup>, and greater otherwise.

10424

CSO: 4011/19

## Hydrology

AUTHOR: HE Quanji [0149 0356 1015]

ORG: Siping Area Hydrology Branch Station, Jilin Province

TITLE: "Hydrology of Eastern Liao He Basin Reviewed"

SOURCE: Beijing SHUIWEN [HYDROLOGY] in Chinese No 1, 25 Feb 85 pp 60-64

ABSTRACT: The eastern Liao He is a major tributary of Liao He named after confluence of the eastern and western Liao He. The eastern Liao He is 448 km long and has a drainage area of 11,306 km<sup>2</sup>. The river's average gradient is 0.062 percent; the drainage includes 34 percent mountainous area, 42 percent plain, and the remainder foothills. Average annual precipitation gradually decreases from 700 mm in its upper reaches to about 450 mm in its lower reaches. More than 75 percent of the rainfall occurs June through September, with slight snowfall in winter. This is the main reason for the spring drought and summer flooding along the eastern Liao He. Likewise, the river runoff is high from June through September. Usually, a rainstorm lasts 3 days with 80 percent of the precipitation concentrated in a single day. Generally, a flood lasts 1 to 3 days. In the eastern mountainous area, the flood rises and drops rapidly with a well-defined flood peak that is of short duration. The annual average silt content is about 5 kg/m<sup>3</sup> of river flow; the maximum silt content during flood may be 90 kg/m<sup>3</sup> (in 1966) or higher. Thus, soil erosion is serious. Water pollution in the Liaoyuan sector of the upper reaches is serious due to industrial sewage.

Three tables show characteristic river data at hydrological stations, flood flows and 24-hour rainfall records. Five figures give the average annual precipitation, evaporation and runoff depth isopleths, flood flow process and groundwater table.

10424

CSO: 4011/19



Pedology

AUTHOR: XU Peng [1776 2590]  
LU Chenglong [4151 4453 7127]

ORG: Fujian Agricultural Research Academy; Dept of Soil and Agrochemistry,  
Fujian Agricultural College

TITLE: "Essentials on the Regions of Red Soils and Yellow Soils Utilization  
and Improvement in Fujian"

SOURCE: Fuzhou FUJIAN NONGXUE YUAN XUEBAO [JOURNAL OF FUJIAN AGRICULTURAL  
COLLEGE] in Chinese No 1, Mar 85 p 20

ABSTRACT: According to the requirements and grading standards of zoning red soils and yellow soils utilization and improvement, the whole land of Fujian is divided into two soil zones, four soil regions and eight soil groups. They are arranged as follows:

I. Red soils and yellow soils zone of the central subtropics.

A. Mountainous red soils, yellow soils and paddy soils, as forest, crop and tea regions of Wuyi-Daiyun Shan, Jiufeng Shan.

1. Mountainous red soils, yellow soils and yellow paddy soils, improved low productive soils and erosion defense groups at medium mountains of northeastern Fujian.

2. Mountainous yellow soils, red soils and cold nondrained soils, improved low productive soils and well manured groups at medium mountains of northwestern Fujian.

3. Red soils, cold nondrained soils and fluvoaquic paddy soils, improved low productive soils, well manured and erosion defense groups at low mountains and basins between mountains of northern Fujian.

4. Red soils, mountainous yellow soils and yellow paddy soils, integrated improved groups of medium mountains of central Fujian.

5. Red soils, mountainous yellow soils, purple soils and yellow paddy soils, improved low productive soils and soil conservation groups at valleys, basins and medium mountains of southwestern Fujian.

B. Red soils, paddy soils and solonchak, as crop, tea regions of the hill and plain eastern seacoast of Fujian and Zhejiang.

1. Red soils, dark paddy soils, yellow paddy soils and desalinized paddy soils, drought control, well manured and soil conservation groups at hill and plain of Fujian eastern seacoast.

II. Lateritic red soils-red soils zone of southern subtropics.

A. Lateritic red soils, red soils and paddy soils, at crop, cash crops and tropical crops regions of southeastern seacoast.

1. Lateritic red soils, dark paddy soils, desalinized paddy soils and red sandy soils, soil conservation, well manure and drought control groups at hills and plain of southeastern Fujian.

B. Lateritic red soils, red soils and paddy soils, at crop, forestry and cash crops regions at low mountains and hills of Fujian and Guangdong.

1. Lateritic red soils, red soils, red sandy soils and sandy fluvoaquic paddy soils, erosion defense and drought defense groups at low mountains and hills of southeastern Fujian.

CSO: 4011/20

END